FSVeg

DATA DICTIONARY

SECTION I: DATA TABLES

February 2014

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DEFINITIONS

The following are definitions of terms used throughout the sections in this document:

Code Tables	Oracle tables that contain valid codes for a specific column in the data tables. All of the tables in Section II are code tables.
Data Tables	Oracle tables that contain field sampled data. All of the tables in Section I are data tables.
Data Elements	Columns within a data table.
Size	The size of each column.
VC	The Oracle column type of Varchar2. Varchar2 is an alphanumeric field that may contain numbers and characters up to the maximum size.
N	The Oracle column type of Number. Number columns cannot contain alpha characters. A number column may contain numbers up to the maximum size.
Date	The Oracle column type of DATE. This column may only contain dates i.e. 24-JUN-1997.
CN	ORACLE sequence generated number used as a primary key in some tables.
Primary Key	Columns that contain a unique identifier for each row of data in a table. The primary key can be used to join tables.
Foreign Key	Columns that contain the primary keys from related tables. When two tables are related, the primary key of the first table becomes the foreign key of the second table (depending on the relationship of the tables).
Setting	Any area (stand, location, site, plot) that is considered an aggregation of individual items (trees, plants, shrubs, plots) being measured.
Check Constraints	A list of valid codes for a column. If a column has check constraints, code tables are not used.

NRV_AERIAL_PHOTOS

This table contains columns describing aerial photos. It is used to document the photograph on which the stand, setting, or other sample area is delineated.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number that uniquely identifies each row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
PHOTO_ID ***Required***	VC(20)	A unique ID for each photo, defined within a photo project.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
FLIGHT_LINE	VC(5)	The flight line number on which a photo was taken.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
PHOTO_EXPOSURE	VC(4)	The number on the film that represents a specific photo.
PHOTO_PROJECT	VC(255)	The name of a specific photo or set of photos.
PHOTO_ROLL	VC(10)	The ID of a roll of film a photo belongs to.
PHOTO_SCALE	VC(20)	The proportion used to determine the relationship of a photo to the landscape. A common photo scale is 1:2500.
PHOTO_TYPE	VC(4)	The type of photo. **Code** / **Description** / **Use** BW / Black and white / CSE CO / Color / CSE CI / Color infrared / CSE
PHOTO_YEAR	VC(4)	The year the photo was taken.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.

NRV_CHARACTERIZATIONS

This table contains columns describing polygon attribute summary data.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA_METHOD ***Required***	VC(30)	Nrv_cn_temp.source_method
DATA_SOURCE ***Required***	VC(30)	Nrv_cn_temp.source_type
SETTING_ID ***Required***	VC(30)	Nrv_setting_measurements.setting_id
SUMMARY_NO ***Required***	VC(10)	Nrv_controls.summary_no
AGENCY	VC(4)	Governing agency or the agency that owns the land the setting is located on.
AGGREGATION_TYPE	VC(1)	Nrv_perm_char.aggregation_type
ANN_INCR_MEAN	N(8,4)	Nrv_perm_char.annual_inc_mean
ANN_INCR_PER	N(8,4)	Periodic annual increment. Volume of tree growth, in cubic foot volume per acre, over a period divided into the number of years in the period.
ANN_INCR_PER_LN	N(3)	Always set to "1"
ASPECT	N(3)	Nrv_setting_measurements.aspect

BASAL_AREA	N(8,4)	**Computed**. Basal area per acre, in square feet, for live trees
		
		SELECT DISTINCT plot
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		LOOP
		FETCH C_PLOT INTO point;
		SELECT SUM(plot_ba_eq) INTO tsum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn
		AND plot = point AND live_dead = 'L'
		AND (dbh >= dia OR drc >= dia)
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		sdba := ROUND(SQRT((psum - ((ssum * ssum)
		/pnum)) / (pnum - 1)),3);

BASAL_AREA_CV	N(13,4)	**Computed.** Basal area coefficient of variation, for live trees =(v_basal_area_sd *100)/basal_area

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description

BASAL_AREA_SD	N(13,4)	**Computed**. Basal area standard deviation, for live trees
		
		SELECT DISTINCT plot
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		LOOP
		FETCH C_PLOT INTO point;
		SELECT SUM(plot_ba_eq) INTO tsum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn AND plot = point
		AND live_dead = 'L'
		AND (dbh >= dia OR drc >= dia)
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		sdba := ROUND(SQRT((psum - ((ssum * ssum)
		/pnum)) / (pnum - 1)),3);

BASAL_AREA_SE	N(7,4)	**Computed.** Basal area standard error SELECT COUNT(DISTINCT plot) into v_pnum FROM NRV_stid_summary_base_temp WHERE cn = p_stand_cn; v_std_error := p_basal_area / sqrt(v_pnum);
BOUNDARY_SOURCE	VC(30)	Nrv_perm_char.boundary_source
CANOPY_BULK_DENSITY	N(3)	Not used at this time
CANOPY_CLOSURE	N(3)	Nrv_setting_measurements.canopy_closure
CANOPY_CLOSURE_CROWNVEG	N(3)	Amount, in percent, of the polygon covered by the foliage of crown vegetation.
CANOPY_CLOSURE_GRASSES	N(3)	Amount, in percent, of the polygon covered by the foliage of grasses.
CANOPY_CLOSURE_HERBS	N(3)	Nrv_perm_char.canopy_closure_herbs
CANOPY_CLOSURE_NON_TREE	N(3)	Nrv_perm_char.canopy_closure_non_tree
CANOPY_CLOSURE_SHRUBS	N(3)	Nrv_perm_char.canopy_closure_shrubs
CANOPY_CLOSURE_TREES	N(3)	Nrv_setting_measurements.canopy_closure
CANOPY_COVER	N(4,1)	Nrv_perm_char.canopy_cover
CAPABLE_GROW_AREA_PCT	N(3)	Nrv_setting_measurement.capable_grow_area_pct
COMPARTMENT_NO	VC(10)	Nrv_setting_measurements.compartment_no
CONDITION_CLASS	VC(15)	Not used at this time
COUNTY	VC(3)	Nrv_setting_measurements.county
COVER_BARE_SOIL	N(3)	Nrv_cover_measurements.cover_bare_soil
COVER_BARREN	N(3)	Nrv_perm_char.cover_barren
COVER_BASAL_VEG	N(3)	Nrv_perm_char.cover_basal_veg
COVER_BOULDER	N(3)	Nrv_perm_char.cover_boulder
COVER_COBBLE	N(3)	Nrv_perm_char.cover_cobble
COVER_DOMINANT	VC(2)	Nrv_perm_char.cover_dominant

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description
COVER_GRAVEL	N(3)	Nrv_perm_char.cover_gravel
COVER_LITTER	N(3)	Nrv_perm_char.cover_litter
COVER_NON_VEG	N(3)	Nrv_perm_char.cover_non_veg
COVER_ROCK	N(3)	Nrv_perm_char.cover_rock
COVER_STONE	N(3)	Nrv_perm_char.cover_stone
COVER_WATER	N(3)	Nrv_perm_char.cover_water
CROWN_BASE_HEIGHT	N(3)	Not used at this time
CROWN_CONDITION	VC(1)	Nrv_perm_char.crown_condition
CROWN_CONDITION_REF	VC(30)	Not used at this time
CROWN_FIRE	VC(2)	Not used at this time
CROWNING_INDEX	N(3)	Not used at this time
CUBIC_CULL	N(11,4)	Nrv_perm_char.cubic_cull
CURRENT_FLAG	VC(1)	Nrv_cover_id_control.current_flag
DATE_ACCURACY	VC(5)	Nrv_setting_measurements.date_accuracy
DBH	N(5,2)	**Computed.** Quadratic mean diameter, in inches, at breast height, or the diameter, in inches, of the tree at breast height, of average basal area. SELECT SUM(stand_tpa_eq), SUM(dbh*dbh*stand_tpa_eq) FROM NRV_Stid_Summary_Base_Temp WHERE cn = stand_cn AND dbh >= dia AND dbh IS NOT NULL AND live_dead = 'L' AND off_plot_flag IS NULL; CURSOR C_qmd2 IS SELECT SUM(stand_tpa_eq), SUM(drc*drc*stand_tpa_eq) FROM NRV_Stid_Summary_Base_Temp WHERE cn = stand_cn AND drc >= dia AND drc IS NOT NULL AND live_dead = 'L' AND off_plot_flag IS NULL; FETCH C_qmd1 INTO dhtsum, dh2tsum; FETCH C_qmd2 INTO drtsum, dr2tsum; qmd:=SQRT((dh2tsum+dr2tsum)/(dhtsum+drtsum));
DBH_BREAKPOINT	N(5,2)	Nrv_perm_char.dbh_breakpoint
DBH_TYPE	VC(4)	The value the user chose for calculating diameter in the summary application.

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description
DENSITY_INDEX	N(7,2)	**Computed**. Stand density index. SELECT sum(power(sqrt(p_gmin_x)/10,1.605)* decode(dbh,NULL,decode(drc,NULL,NULL,1) ,0,NULL,1)* decode(live_dead,'L',stand_tpa_eq,NULL)* (1+(1.605/2) * (decode(dbh,NULL,decode(drc,NULL,NULL,1),0,NULL, 1) * decode(live_dead,'L',decode(dbh,NULL,drc,dbh)* decode(dbh,NULL,drc,dbh),NULL)/ decode(p_gmin_x,0,NULL,p_gmin_x)-1))) INTO v_den_ind FROM NRV_Stid_Summary_Base_Temp WHERE cn = p_stand_cn AND (drc >= p_gmin OR dbh >= p_gmin) AND off_plot_flag IS NULL AND live_dead='L'
DENSITY_INDEX_REF	VC(30)	Nrv_perm_char.density_index_ref
DENSITY_INDEX_TYPE	VC(30)	Set to "QMD."
DISTRICT_NO	VC(2)	Nrv_setting_measurements.district_no
DOWN_WOODY	N(10,4)	Nrv_perm_char.down_woody
DUFF_LITTER_DEPTH	N(6,3)	Nrv_perm_char.duff_litter_depth
ECOREGION_SUBSECTION	VC(7)	Nrv_setting_measurements.ecoregion.
ELEVATION	N(6,1)	Nrv_setting_measurements.elevation
ELEVATION_MAX	N(6,1)	Nrv_setting_measurements.elevation
ELEVATION_MIN	N(6,1)	Nrv_setting_measurements.elevation
EV_CODE	VC(10)	Nrv_setting_measurements.ev_code
EV_REF_CODE	VC(10)	Nrv_setting_measurements.ev_ref_code
FIRE_REGIME	N(1)	Not used at this time
FORAGE	N(4)	Nrv_perm_char.forage
FOREST_ADMIN	VC(2)	Nrv_setting_measurements.forest_admin
FOREST_PROC	VC(2)	Nrv_setting_measurements.forest_proc
FUEL_DEPTH	N(3,1)	Nrv_perm_char.fuel_depth
FUEL_MODEL	VC(3)	Nrv_setting_measurements.fuel_model
FUEL_PHOTO_REFERENCE	VC(10)	Nrv_setting_measurements.fuel_photo_reference
GIS_LINK	VC(26)	Nrv_setting_measurements.gis_link
HAB_STRUCT_STAGE_CODE	VC(50)	Nrv_vss.vss output (only used for Regions 2, 3, & 4)
HAB_STRUCT_STAGE_REF	VC(30)	Region code in the format 'R02,' 'R03,' 'R04' (only used for Regions 2, 3, & 4)
HABITAT_EFFECT_INDEX	VC(1)	Not used at this time
HAZ_RATING	VC(1)	Not used at this time
HORIZONTAL_CONTINUITY	VC(1)	Nrv_perm_char.horizontal_continuity
INVENTORY_STRATIFICATION	VC(10)	Nrv_perm_char.inventory_stratification
LANDFORM	VC(2)	Nrv_perm_char.landform
LATITUDE_DEG	N(3)	Nrv_setting_measurements.latitude_deg
LATITUDE_MIN	N(2)	Nrv_setting_measurements.latitude_min
LATITUDE_SEC	N(4,2)	Nrv_setting_measurements.latitude_sec

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description
LOADER_VERSION	VC(15)	The version of the loader program used to load the data into the perm summary tables.
LOCAL_AT1_DESCRIPTION	VC(80)	Nrv_perm_char.local_at1_description
LOCAL_AT2_DESCRIPTION	VC(80)	Nrv_perm_char.local_at2_description.
LOCAL_AT3_DESCRIPTION	VC(80)	Nrv_perm_char.local_at3_description.
LOCAL_AT4_DESCRIPTION	VC(80)	Nrv_perm_char.local_at4_description.
LOCAL_AT5_DESCRIPTION	VC(80)	Nrv_perm_char.local_at5_description.
LOCALLY_DEFINED_AT1	VC(30)	Nrv_perm_char.locally_defined.at1
LOCALLY_DEFINED_AT2	VC(30)	Nrv_perm_char.locally_defined.at2
LOCALLY_DEFINED_AT3	VC(30)	Nrv_perm_char.locally_defined.at3
LOCALLY_DEFINED_AT4	VC(30)	Nrv_perm_char.locally_defined.at4
LOCALLY_DEFINED_AT5	VC(30)	Nrv_perm_char.locally_defined.at5
LOCATION	VC(16)	Nrv_setting_measurements.location
LONGITUDE_DEG	N(3)	Nrv_setting_measurements.longitude_deg
LONGITUDE_MIN	N(2)	Nrv_setting_measurements.longitude_min
LONGITUDE_SEC	N(4,2)	Nrv_setting_measurements.longitude_sec
MANAGEMENT_PRODUCTIVITY	VC(1)	An indicator of the mean annual increment of stand growth.
MANAGEMENT_TYPE_EV_CODE	VC(50)	Not used at this time
MANAGEMENT_TYPE_EV_REF	VC(30)	Not used at this time
MANAGEMENT_TYPE_SITE_INDEX	N(4,1)	Not used at this time
MANAGEMENT_TYPE_SI_ REFCODE	VC(3)	Not used at this time
MANAGEMENT_TYPE_SI_SPECIES	VC(8)	Not used at this time
MEASUREMENT_DATE	DATE	Nrv_setting_measurements.measurement_date
MERCH_BOARD_GROSS	N(13,4)	**Computed**. Merchantable, gross board foot volume per acre. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4. SELECT SUM(stand_tpa_eq * merch_board_volume) FROM NRV_stid_summary_base_temp WHERE cn = stand_cn AND live_dead = 'L' AND (dbh >= dia OR drc >= dia) AND off_plot_flag IS NULL;

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description

MERCH_BOARD_GROSS_SD	N(15,4)	**Computed.** Standard deviation of the merch_board_gross column. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4.
		
		SELECT DISTINCT plot
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn;
		LOOP
		FETCH C_PLOT INTO point;
		SELECT SUM(plot_tpa_eq * board_volume) INTO tsum
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn AND plot = point
		AND live_dead = 'L'
		AND (dbh >= dia OR drc >= dia)
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		sdbvol := ROUND(SQRT((psum - ((ssum * ssum) /pnum)) / (pnum - 1)),3);

MERCH_BOARD_GROSS_SE	N(7,4)	**Computed**. Standard error of the merch_board_gross column. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4. SELECT COUNT(DISTINCT plot) into v_pnum FROM NRV_stid_summary_base_temp WHERE cn = p_stand_cn; v_std_error := p_sdtpa / sqrt(v_pnum);
MERCH_BOARD_NET	N(13,4)	Nrv_perm_char.merch_board_net
MERCH_BOARD_NET_SD	N(15,4)	Nrv_perm_char.merch_board_net_sd
MERCH_BOARD_NET_SE	N(7,4)	Nrv_perm_char.merch_board_net_se
MERCH_CUBIC_GROSS	N(11,4)	**Computed.** Merchantable, gross cubic foot volume per acre. For Region 9, this is the cubic foot volume in the sawlog portion of sawtimber trees. It does not include the topwood volume. It does not include pulpwood tree volume. SELECT SUM(stand_tpa_eq * merch_cubic_volume) FROM NRV_stid_summary_base_temp WHERE cn = stand_cn AND live_dead = 'L' AND (dbh >= dia OR drc >= dia) AND off_plot_flag IS NULL;

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description

MERCH_CUBIC_GROSS_SD	N(13,4)	**Computed**. Standard deviation of the merch_cubic_gross column.
		
		SELECT DISTINCT plot
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn;
		LOOP
		FETCH C_PLOT INTO point;
		SELECT SUM(plot_tpa_eq * cubic_volume) INTO tsum
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn AND plot = point
		AND live_dead = 'L' AND (dbh >= dia OR drc >= dia)
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		sdcvol := ROUND(SQRT((psum - ((ssum * ssum) /pnum)) / (pnum - 1)),3);

MERCH_CUBIC_GROSS_SE	N(7,4)	**Computed.** Standard error of the merch_cubic_gross column. SELECT COUNT(DISTINCT plot) into v_pnum FROM NRV_stid_summary_base_temp WHERE cn = p_stand_cn; v_std_error := p_sdtpa / sqrt(v_pnum);
MERCH_CUBIC_NET	N(11,4)	Nrv_perm_char.merch_cubic_net
MERCH_CUBIC_NET_SD	N(13,4)	Nrv_perm_char.merch_cubic_net_sd
MERCH_CUBIC_NET_SE	N(7,4)	Nrv_perm_char.merch_cubic_net_se
MERIDIAN_CODE	VC(2)	Nrv_setting_measurements.meridian_code
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
NFS_LAND_CLASS	VC(3)	Current land class used for NFS data. A classification that indicates the basic land cover.
PERM_CHAR_CN	VC(34)	Nrv_perm_char.cn
PHOTO_ID	VC(20)	Nrv_aerial_photos.photo_id
POLYGON_COVERAGE_ID	VC(30)	Nrv_cover_id_control.polygon_cover_id
PRODUCTIVITY_CLASS	VC(2)	Nrv_perm_char.productivity_class
PROJECT_NAME	VC(25)	Nrv_characterizations.project_name
PURPOSE_CODE	VC(4)	Code that represents the reason for the survey
PV_CODE	VC(10)	Nrv_setting_measurements.pv_code
PV_REF_CODE	VC(10)	Nrv_setting_measurements.pv_ref_code

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description
RANGE_CONDITION	VC(1)	Nrv_perm_char.range_condition
RANGE_TREND	VC(1)	Nrv_perm_char.range_trend
REGEN_EV_CODE	VC(10)	Not used at this time
REGEN_EV_REF_CODE	VC(10)	Not used at this time
REFERENCE_DATE	DATE	Nrv_perm_char.reference_date
REFERENCE_DATE_ACCURACY	VC(5)	Nrv_perm_char.reference_date_accuracy
REGION_ADMIN	VC(2)	Nrv_setting_measurements.region_admin
REGION_PROC	VC(2)	Nrv_setting_measurementsr.region_proc
REMARKS	VC(255)	Nrv_setting_measurements.remarks
RESIDUE_DESC_CODE	VC(10)	Document from which the fuel model was obtained or the residue description photo.
RIPARIAN_POLYGON	VC(1)	Not used at this time
SAF_COVER_TYPE	VC(3)	Nrv_setting_measurements.ev_code if cover type ref = "SAF"
SECTION	VC(2)	Nrv_setting_measurements.pls_section
SETMEAS_CN	VC(34)	Nrv_setting_measurements.cn
SETTING_ORIGIN	VC(2)	Not used at this time
SETTING_SIZE	N(8,4)	Nrv_setting_measurements.setting_size
SITE_INDEX	N(4,1)	Nrv_perm_char.site_index
SITE_INDEX_REF	VC(10)	Nrv_perm_char.site_index_ref
SITE_INDEX_SPP	VC(8)	Nrv_perm_char.site_index_spp
SLOPE	N(3)	Nrv_setting_measurements.slope
SLOPE_POSITION	VC(2)	Nrv_setting_measurements.slope_position
SRM_COVER_TYPE	VC(3)	Nrv_setting_measurements.ev_code if cover type ref = "SRM"
STAND_CONDITION	VC(2)	Nrv_perm_char.stand_condition
STAND_CONDITION_REF	VC(30)	Region code in the format 'R08' or 'R09' (only used for Regions 8 & 9)
STAND_FIA_EV_CALC	VC(10)	**Computed**. Existing vegetation or stand type using the FIA algorithm
STAND_FIA_TOTAL_STOCKING	N(7,4)	**Computed.** Total stocking value using the FIA algorithm
STAND_VSS	VC(6)	**Computed.** Vegetation Structural Stage (VSS)
STATE	VC(2)	Nrv_setting_measurements.state
STATE_PLANE_DATUM	VC(10)	Nrv_setting_measurements.state_plane_datum
STATE_PLANE_X	N(12,3)	Nrv_setting_measurements.state_plane_x
STATE_PLANE_Y	N(12,3)	Nrv_setting_measurements.state_plane_y
STATE_PLANE_ZONE	VC(10)	Nrv_setting_measurements.state_plane_zone
STOCKING_FLAG	VC(1)	Nrv_setting_measurements.stocking_flag
STOCING_PERCENT	N(3)	Nrv_setting_mmeasurements.stocking_percent
SUBCOMPARTMENT_NO	VC(10)	Nrv_setting_measurements.subcompartment_no
SURVEY_UNIT	VC(2)	Nrv_setting_measurements.survey_unit
TIMBER_SUITABILITY_CODE	VC(50)	Not used at this time
TIMBER_SUITABILITY_REF	VC(30)	Not used at this time
TIMBER_SUIT_RECOMMEND_ CODE	VC(50)	Not used at this time
TORCHING_INDEX	N(3)	Not used at this time
TOTAL_CUBIC	N(11,4)	Nrv_setting_measurements.total_cubic
TOWNSHIP	VC(5)	Nrv_setting_measurements.pls_township

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description

TPA	N(10,4)	**Computed.** Number of live trees per acre in the site.
		
		SELECT DISTINCT plot
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		FETCH C_PLOT INTO point;
		SELECT SUM(plot_tpa_eq) INTO tsum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn
		AND plot = point AND live_dead = 'L'
		AND (dbh >= dia OR drc >= dia)
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		sdtpa := ROUND(SQRT((psum -((ssum * ssum)
		/pnum)) / (pnum - 1)),3);

TPA_CV	N(13,4)	**Computed.** Coefficient of variation of the TPA column. (v_tpa_sd *100) / v_tpa;

TPA_SD	N(13,4)	**Computed.** Standard deviation of the TPA column.
		
		SELECT DISTINCT plot
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn;
		LOOP;
		FETCH C_PLOT INTO point;
		SELECT SUM(plot_tpa_eq) INTO tsum
		FROM NRV_Stid_Summary_Base_Temp
		WHERE cn = stand_cn
		AND plot = point AND live_dead = 'L'
		AND (dbh >= dia OR drc >= dia)
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		sdtpa := ROUND(SQRT((psum -((ssum * ssum)
		/pnum)) / (pnum - 1)),3);

TPA_SE	N(7,4)	**Computed.** Standard error of the TPA column. SELECT COUNT(DISTINCT plot) into v_pnum FROM NRV_stid_summary_base_temp WHERE cn = p_stand_cn; v_std_error := p_sdtpa / sqrt(v_pnum);

NRV_CHARACTERIZATIONS (cont.)

Name	Size	Description
TREE_HEIGHT_AVG	N(13,4)	Average tree height.
TREE_LAYER_STRUCTURE	VC(2)	Nrv_perm_char.tree_layer_structure
TREE_SIZE_CLASS	VC(2)	Nrv_perm_char.tree_size_class
USGS_LANDUSE2	VC(2)	Nrv_perm_char.usgs_landuse2
UTM_DATUM	VC(10)	NRV_setting_measurements.utm_datum
UTM_EASTING	N(6)	NRV_setting_measurements.utm_easting
UTM_NORTHING	N(7)	NRV_setting_measurements.utm_northing
UTM_ZONE	N(2)	NRV_setting_measurements.utm_zone
YEAR_OF_ORIGIN	N(4)	**Computed.** SELECT SUM(age * tpa_stand_eq * DECODE(age,NULL,NULL,1)), SUM(tpa_stand_eq * DECODE(age,NULL,NULL,1)) FROM NRV_Grp_By_Summary_Temp WHERE cn = stand_cn AND off_plot_flag IS NULL; FETCH C_avage INTO navage, davage; avage := navage/davage;

NRV_COVER_MEASUREMENTS

This table contains columns describing plant and ground cover. There may be multiple species, layers, lifeforms, or ground surface cover entries for each plot. A record must already exist in the Nrv_setting_measurements table before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
AGE	N(4)	Average or predominant age of the cover layer. Stored in years.

NRV_COVER_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>AGE_METHOD</td><td>VC(2)</td><td>Method used to determine the cover item age.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>DM</td><td>Age at DBH, measured</td><td></td></tr><tr><td>DE</td><td>Age at DBH, estimated</td><td></td></tr><tr><td>DC</td><td>Age at DBH, calculated</td><td></td></tr><tr><td>TM</td><td>Total age, measured</td><td></td></tr><tr><td>TE</td><td>Total age, estimated</td><td></td></tr><tr><td>TC</td><td>Total age, calculated</td><td></td></tr></table>
-Age at DBH is the number of years at 4.5 feet above the forest floor on the uphill side of the tree.
-Total age is the age from germination to present. An example of measured total age is boring the plant or destructive sampling at the root collar. An example of estimated total age is measuring the age at DBH and adding an estimate of the number of years it took to reach breast height and adding that to the age at DBH.
-Whorl counts can be measured by physically counting whorls, or estimated.</td></tr>
<tr><td>COLLECTION_NUMBER</td><td>N(4)</td><td>Number assigned to a plant collected in the field for later identification and possible inclusion in a permanent herbarium collection. Valid values are 1-9999.</td></tr>
<tr><td>COVER_METHOD</td><td>VC(2)</td><td>Method used to determine cover percent:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td></td></tr><tr><td>E</td><td>Estimated</td><td>CSE</td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>COVER_PERCENT</td><td>N(4,1)</td><td>Percent of the area occupied by the plant or ground surface cover. Since cover percent is usually recorded as being within a certain range (0-10%), this value indicates the middle of the range (5%). Shrub coverage is determined by the vertical projection of the crowns or ground surface feature of interest.</td></tr>
<tr><td>DATA_CODE_1</td><td>VC(10)</td><td>Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.</td></tr>
<tr><td>DATA_CODE_1_DEFINITION</td><td>VC(160)</td><td>Define the value stored in data_code_1.</td></tr>
<tr><td>DATA_CODE_2</td><td>VC(10)</td><td>Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.</td></tr>
<tr><td>DATA_CODE_2_DEFINITION</td><td>VC(160)</td><td>Define the value stored in data_code_2.</td></tr>
</table>

NRV_COVER_MEASUREMENTS (cont.)

Name	Size	Description
DATA_NUM_1	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_1_DEFINITION	VC(160)	Define the value stored in data_num_1.
DATA_NUM_2	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_2_DEFINITION	VC(160)	Define the value stored in data_num_2.
DATA_NUM_3	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_3_DEFINITION	VC(160)	Define the value stored in data_num_3.
DATA_NUM_4	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_4_DEFINITION	VC(160)	Define the value stored in data_num_4 field in this table.
DEAD_COUNT	N(3)	Number of dead trees or shrubs. Valid values are 1-999.
DIAMETER	N(6,3)	Predominant cross-sectional width of a plant measured through the center of the stem. Stored in inches.
DIAMETER_HEIGHT	N(6,3)	Height above ground where the diameter was measured. Stored in feet. 4.5 feet implies a DBH (diameter breast height) measurement. 0.0 feet implies a DRC (diameter at root collar) measurement.
DIAMETER_METHOD	VC(2)	Method used to measure the diameter: Code / Description / Use M / Measured / E / Estimated / CSE C / Calculated /
DRY_WT	N(8,4)	Total dry weight production of an item. Dry weight can be obtained by multiplying the item's green weight (green_wt) by an appropriate dry weight conversion factor (dry_wt_factor), or by actually drying the item and then measuring the dry weight. Stored in pounds.
DRY_WT_FACTOR	N(5,4)	Decimal value between 0 and 1, applied to green weight estimates to obtain a dry weight value.
FUEL_BASE_HEIGHT	N(5,2)	For the Firemon protocols, height of the fuel ladder
GREEN_WT	N(6,2)	Green weight estimate of above ground biomass by item. Stored in pounds.

NRV_COVER_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>GROWTH_FORM</td><td>VC(2)</td><td>Plant habit code.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>EB</td><td>Evergreen broadleaf</td><td></td></tr><tr><td>EN</td><td>Evergreen needle leaved</td><td></td></tr><tr><td>EV</td><td>Evergreen</td><td></td></tr><tr><td>DE</td><td>Deciduous</td><td></td></tr><tr><td>DB</td><td>Deciduous broadleaf</td><td></td></tr><tr><td>DN</td><td>Deciduous needle leaved</td><td></td></tr></table></td></tr>
<tr><td>HEIGHT</td><td>N(7,4)</td><td>Average or predominant height of the cover layer. Stored in feet.</td></tr>
<tr><td>HEIGHT_CLASS</td><td>VC(2)</td><td>The FGDC height class of the cover value.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>SL</td><td>Shrub, large</td><td>CSE</td></tr><tr><td>SM</td><td>Shrub, medium</td><td>CSE</td></tr><tr><td>ST</td><td>Shrub, small</td><td>CSE</td></tr><tr><td>TS</td><td>Tree, small</td><td>CSE</td></tr><tr><td>TT</td><td>Tree, large</td><td>CSE</td></tr></table></td></tr>
<tr><td>HEIGHT_MAX</td><td>N(7,4)</td><td>Maximum height of a cover layer. Stored in feet.</td></tr>
<tr><td>HEIGHT_MIN</td><td>N(7,4)</td><td>Minimum height of a cover layer. Stored in feet.</td></tr>
<tr><td>INDICATOR_SPECIES_FLAG</td><td>VC(1)</td><td>Indicator species flag.
Y = Yes, this is an indicator species</td></tr>
<tr><td>INTERCEPT</td><td>N(6,2)</td><td>Transect length intercepted by live foliage. Stored in feet.</td></tr>
<tr><td>ITEM_COUNT</td><td>N(3)</td><td>Number of cover items.</td></tr>
<tr><td>LAYER</td><td>VC(3)</td><td>Foreign key to Nrv_cover_layers.</td></tr>
<tr><td>LAYER_CODE_LOCAL</td><td>VC(2)</td><td>Locally defined code for the cover layer.</td></tr>
<tr><td>LIFEFORM_CODE</td><td>VC(2)</td><td>Code of the cover lifeform being estimated. This column is constrained by the codes in Nrv_lifeform_classes</td></tr>
<tr><td>LIFEFORM_MODIFIER</td><td>VC(4)</td><td>Further subdivision and description of each life form.</td></tr>
<tr><td>LIVE_DEAD</td><td>VC(1)</td><td>Indicates if a cover item is live or dead.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>L</td><td>Live</td><td>CSE</td></tr><tr><td>D</td><td>Dead</td><td>CSE</td></tr></table></td></tr>
<tr><td>MAPCOND_CN</td><td>VC(34)</td><td>Foreign key to Nrv_fia_mapped_conditions</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database ID where the record was modified.</td></tr>
</table>

NRV_COVER_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>PHENOLOGY_CLASS</td><td>VC(2)</td><td>Indicates plant or species development at time of sampling with respect to annual phenomena such as bud, flower, or fruit development.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>F1</td><td>Forb/shrub: preflower</td><td></td></tr>
<tr><td>F2</td><td>Forb/shrub: flowering</td><td></td></tr>
<tr><td>F3</td><td>Forb/shrub: flowering</td><td></td></tr>
<tr><td>F4</td><td>Forb/shrub: senescent; dormant</td><td></td></tr>
<tr><td>G1</td><td>Graminoid: leaves partially developed; no heads</td><td></td></tr>
<tr><td>G2</td><td>Graminoid: inflorescence inside the sheath (in the boot)</td><td></td></tr>
<tr><td>G3</td><td>Graminoid: flower partially or fully exerted from sheath</td><td></td></tr>
<tr><td>G4</td><td>Graminoid: seeds maturing or mature</td><td></td></tr>
<tr><td>G5</td><td>Graminoid: senescent; dormant</td><td></td></tr>
</table>
</td></tr>
<tr><td>PRESENCE_FLAG</td><td>VC(1)</td><td>Flag indicating presence of a flora item in site level investigation. It may also be used to indicate that a flora item (generally species) is generally present, and found adjacent to, but not in, the plot.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>X</td><td>Not assessed</td><td></td></tr>
<tr><td>P</td><td>Present</td><td>CSE</td></tr>
<tr><td>A</td><td>Absent</td><td></td></tr>
</table>
</td></tr>
<tr><td>QUAD_1_PRESENCE</td><td>VC(1)</td><td>Quadrat 1 presence. A code indicating whether the species is found on quadrat 1 of the current subplot

<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>0</td><td>No, the species is not present</td></tr>
<tr><td>1</td><td>Yes, the species is present</td></tr>
</table>
</td></tr>
<tr><td>QUAD_2_PRESENCE</td><td>VC(1)</td><td>Quadrat 2 presence. A code indicating whether the species is found on quadrat 2 of the current subplot

<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>0</td><td>No, the species is not present</td></tr>
<tr><td>1</td><td>Yes, the species is present</td></tr>
</table>
</td></tr>
</table>

NRV_COVER_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>QUAD_3_PRESENCE</td><td>VC(1)</td><td>Quadrat 3 presence. A code indicating whether the species is found on quadrat 3 of the current subplot

<table><tr><th>Code</th><th>Description</th></tr><tr><td>0</td><td>No, the species is not present</td></tr><tr><td>1</td><td>Yes, the species is present</td></tr></table></td></tr>
<tr><td>REMARKS</td><td>VC(255)</td><td>Remarks pertaining to the cover record.</td></tr>
<tr><td>ROW_ACCESS_CODE</td><td>VC(6)</td><td>Control field to support row level access.</td></tr>
<tr><td>SELCRIT_CN</td><td>VC(34)</td><td>Foreign key to Nrv_selection_criteria</td></tr>
<tr><td>SHRUB_AGE_CLASS</td><td>VC(2)</td><td>Estimate of the age class of a shrub or tree. Shrub age class is based on the percentage of branch or foliage maturity. Tree age class is based on overall appearance, crown, branch, and bark characteristics.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>SS</td><td>Seedling/sprout</td><td>CSE</td></tr><tr><td></td><td>Immature, no dead material (stems and branches) associated with the shrub record.</td><td>FIA</td></tr><tr><td>YO</td><td>Young</td><td>CSE</td></tr><tr><td></td><td>Mature, 1-24 percent dead material associated with the shrub record.</td><td>FIA</td></tr><tr><td>MA</td><td>Mature</td><td>CSE</td></tr><tr><td></td><td>Over-mature, 25-49 percent dead material associated with shrub record.</td><td>FIA</td></tr><tr><td>DE</td><td>Decadent</td><td>CSE</td></tr><tr><td></td><td>Decadent, 50 percent or more dead material associated with shrub record.</td><td></td></tr><tr><td>X</td><td>Dead</td><td>CSE</td></tr></table></td></tr>
</table>

NRV_COVER_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SHRUB_FORM_CLASS</td><td>VC(4)</td><td>Shrub form is determined for established shrubs based on an evaluation of the foliage.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>HIMV</td><td>Mostly available, highlined.</td><td></td></tr>
<tr><td>HIUN</td><td>Unavailable, highlined.</td><td></td></tr>
<tr><td>LIAV</td><td>All available, little or no hedging.</td><td></td></tr>
<tr><td>LIHE</td><td>Little or no hedging: 2-year wood is relatively long/unaltered from normal growth form.</td><td></td></tr>
<tr><td>LIPA</td><td>Partially available, little or no hedging.</td><td></td></tr>
<tr><td>MOAV</td><td>All available, moderate hedging.</td><td></td></tr>
<tr><td>MOHE</td><td>Moderately hedged: 2-year wood is fairly long but altered from normal growth form.</td><td></td></tr>
<tr><td>MOPA</td><td>Partially available, moderately hedged.</td><td></td></tr>
<tr><td>SEHE</td><td>Severely hedged: 2-year wood is relatively short and/or strongly altered.</td><td></td></tr>
<tr><td>SEPA</td><td>Partially available, severely hedged.</td><td></td></tr>
<tr><td>SOAV</td><td>All available, severely hedged.</td><td></td></tr>
</table>
</td></tr>
<tr><td>SPA_EQUIV</td><td>N(10,5)</td><td>Computed. Number of stems per acre this sampled vegetation record represents. Based on the sample design of the plot.</td></tr>
</table>

NRV_COVER_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SPECIES_CERTAINTY</td><td>VC(1)</td><td>The confidence in each species designation. Plants coded 3, 4, or 5 must be tracked on the Unknown Spreadsheet.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Not known how confident, only used to crosswalk old databases with no certainty designations.</td><td></td></tr>
<tr><td>1</td><td>Certain in the field, most commonly used designation.</td><td></td></tr>
<tr><td>2</td><td>Uncertain species (probably this species) use when species is somewhat in question.</td><td></td></tr>
<tr><td>3</td><td>Uncertain of genus (probably this genus) use when genus is somewhat in question, but there isn’t enough plant material to collect or determining plant parts are not present.</td><td></td></tr>
<tr><td>4</td><td>Unknown, specimens collected for herbarium identification.</td><td></td></tr>
<tr><td>5</td><td>Unknown, not collected (not enough plant material to collect for herbarium identification) used for very young, rare, or damaged plants when there is not enough material to collect for herbarium identification.</td><td></td></tr>
</table></td></tr>
<tr><td>SPECIES_SYMBOL</td><td>VC(8)</td><td>The NRCS PLANTS code of the species represented by this record. For example, PSME = Pseudotsuga menziesii. Constrained by values in the appropriate TAXA table.</td></tr>
<tr><td>SUBGROUP_CODE</td><td>VC(4)</td><td>A 'sub-stratification' of the major sample unit, used to categorize cover records within the setting into different conditions.</td></tr>
<tr><td>SUBSAMPLE</td><td>VC(2)</td><td>Subsample number</td></tr>
<tr><td>SURFACE_COVER_CODE</td><td>VC(4)</td><td>Non-vegetative cover. This column is constrained by the codes in Nrv_surface_cover_types</td></tr>
<tr><td>TAG_ID</td><td>VC(5)</td><td>Unique number physically attached to a cover item or assigned to a record.</td></tr>
</table>

NRV_COVER_MEASUREMENTS (cont.)

Name	Size	Description
UTILIZATION_CLASS	VC(4)	Estimate of percent utilization based on volume of the current year's growth removed by animals. For those species to be characterized enter one of the following class codes to describe the percent utilization present.

Code	Description	Use
1	0 - <1%	
3	1 - 5%	
10	6 - 15%	
20	16 - 25%	
30	26 - 35%	
40	36 - 45%	
50	46 - 55%	
60	56 - 65%	
70	66 - 75%	
80	76 - 85%	
90	86 - 95%	
98	96 - 100%	

UTILIZATION_PERCENT	N(3)	An estimate of percent of volume of the current year's growth removed by herbivores.
VOUCHER_FLAG	VC(1)	Was an actual "voucher" specimen collected? Y = yes

NRV_CREW_INFO

This table contains columns describing the crew that collected the FIA data.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
DATA_TYPE	VC(2)	Type of data measured on the plot. 1 = FIA P2 2 = FIA P3 DWM

NRV_CREW_INFO (cont.)

Name	Size	Description
ID	VC(6)	This is a RMRS variable. It contains up to 5 crew numbers as assigned to the field crew. The crew supervisor is recorded first (e.g. for crew supervisor 02 working with crew members 12 and 31, record 002, 012, 031, 000, 000).
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
NAME	VC(20)	For the P3-Vegetation Diversity variable, this value contains the full names of each crewmember measuring vegetation. For the PNW Regional variable, it contains the first initial and last name of up to five people taking measurements on the plot.
TYPE	VC(2)	Type of crew measuring the plot. National Core Variable 1 = Standard 2 = QA 3 = Special study 4 = Gradient study 5 = Evaluation monitoring 6 = Trainer 7 = Expert

NRV_DATA_CODE_COVMEAS

This table contains columns describing FIA specific cover measurements.

Name	Size	Description
COVMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_cover_measurements.
DCDESC_CN ***Required***	VC(34)	Foreign key to Nrv_data_code_descriptions.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA ***Required***	VC(20)	The observed or measured value associated with Nrv_data_code_descriptions.data_id This is linked via dcdesc_cn
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_DATA_CODE_DESCRIPTIONS

This table describes the valid values in Nrv_data_code.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA_CODE_TABLE ***Required***	VC(30)	The name of one of the seven data_code_tables. **Code** / **Use** Nrv_data_code_covmeas / CSE Nrv_data_code_dwmeas / CSE Nrv_data_code_fia_mapcons / FIA Nrv_data_code_reference / CSE Nrv_data_code_setmeas / CSE Nrv_data_code_treemeas / CSE Nrv_data_code_fire_info / CSE
DATA_DESCRIPTION ***Required***	VC(80)	Describes the data_id column
DATA_ID ***Required***	VC(30)	First field in the unique key.
FORMAT ***Required***	VC(20)	Describes the format of data_id.
SOURCE ***Required***	VC(9)	Second field in the unique key. All records created by the FSVeg staff are placed on each site with a designated cn. Any records site adds will have this column auto-populated with the site's instance ID.
CONSTRAINING_REFERENCE_TABLE	VC(30)	In some cases, a Region or Forest may want to constrain a specific data_id using a valid value look up table. The name of that table would be stored here.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
PRECISION	VC(50)	Precision description associated with the Units of Measure.
START_VALUE	N(13,6)	The minimum value of the data_id field
STOP_VALUE	N(13,6)	The maximum value of the data_id field
STEP	N(13,6)	The allowable increments of the data_id field. For example, if the only valid values a data_id field are 10, 20, 30, and 40, the start_value is set to 10, the stop_value is set to 40, and the step value is set to 10.
UNITS	VC(25)	Units of measure for the data_id field

NRV_DATA_CODE_DWMEAS

This table describes down woody material data not defined by national FIA protocols.

Name	Size	Description
DWMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_down_woody_measurements.
DCDESC_CN ***Required***	VC(34)	Foreign key to Nrv_data_code_descriptions.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA ***Required***	VC(20)	The observed or measured value associated with Nrv_data_code_descriptions.data_id
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_DATA_CODE_FIA_MAPCONS

This table describes mapped condition data not defined by national FIA protocols.

Name	Size	Description
MAPCOND_CN ***Required***	VC(34)	Foreign key to Nrv_fia_mapped_conditions.
DCDESC_CN ***Required***	VC(34)	Foreign key to Nrv_data_code_descriptions.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA ***Required***	VC(20)	The observed or measured value associated with Nrv_data_code_descriptions.data_id
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_DATA_CODE_FIRE_INFO

This table describes the local codes in Nrv_fire_info

Name	Size	Description
CREATED_BY ***Required***	VC(30)	The name of the person who created the record
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
DATA ***Required***	VC(20)	The observed or measured value associated with Nrv_data_code_descriptions.data_id.
DCDESC_CN ***Required***	VC(34)	Foreign key to Nrv_data_code_descriptions.
FIRE_INFO_CN ***Required***	VC(34)	Foreign key to Nrv_fire_info.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.

NRV_DATA_CODE_REFERENCES

This table describes the valid data values associated with unique combinations of data_id and source columns in Nrv_data_code_descriptions.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
DCDESC_CN ***Required***	VC(34)	Foreign key to Nrv_data_code_descriptions
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA_DESCRIPTION ***Required***	VC(80)	Describes the code or value stored in valid_data
VALID_DATA ***Required***	VC(20)	Contains a valid code for a specific data stored in Nrv_data_code_descriptions.data_id. Each row in this table represents a single valid code. There could be many records in this table linked to a single Nrv_data_code_descriptions.data_id record

NRV_DATA_CODE_REFERENCES (cont.)

Name	Size	Description
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_DATA_CODE_SETMEAS

This table describes setting, cluster, plot, subplot, etc., data not defined by national FIA protocol.

Name	Size	Description
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
DCDESC_CN ***Required***	VC(34)	Foreign key to Nrv_data_code_descriptions.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA ***Required***	VC(20)	The observed or measured value associated with Nrv_data_code_descriptions.data_id
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_DATA_CODE_TREEMEAS

This table describes tree data not defined by national FIA protocol.

Name	Size	Description
TREMEAS_CN ***Required***	VC(34)	Foreign key to the table Nrv_tree_measurements.
DCDESC_CN ***Required***	VC(34)	Foreign key to the table Nrv_data_code_descriptions.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.

NRV_DATA_CODE_TREEMEAS (cont.)

Name	Size	Description
DATA ***Required***	VC(20)	The observed or measured value associated with Nrv_data_code_descriptions.data_id
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_DOWN_WOODY_MEASUREMENTS

This table describes down woody material. This data is generally collected in classes; an example is counting the number of pieces between 12 and 24 inches in diameter. There can be multiple measurements on each plot. A record must already exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
CHARRED	N(3)	For all logs ≥ 20 inches in diameter at the point of intersection and in decay class 1,2, or 3, record a 1-digit code that represents the percentage of the log's surface area that has been charred by fire.
DATA_CODE_1	VC(10)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_1_DEFINITION	VC(160)	Define the value stored in data_code_1.

Code	Description	Use
0	None	FIA
1	Up to 1/3 of the log	FIA
2	1/3 to 2/3 of the log	FIA
3	2/3 or more of the log	FIA

NRV_DOWN_WOODY_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>DATA_CODE_2</td><td>VC(10)</td><td>Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.</td></tr>
<tr><td>DATA_CODE_2_DEFINITION</td><td>VC(160)</td><td>Define the value stored in data_code_2.</td></tr>
<tr><td>DATA_NUM_1</td><td>N(7,2)</td><td>Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.</td></tr>
<tr><td>DATA_NUM_1_DEFINITION</td><td>VC(160)</td><td>Define the value stored in data_num_1.</td></tr>
<tr><td>DATA_NUM_2</td><td>N(7,2)</td><td>Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.</td></tr>
<tr><td>DATA_NUM_2_DEFINITION</td><td>VC(160)</td><td>Define the value stored in data_num_2.</td></tr>
<tr><td>DECAY_CLASS</td><td>VC(2)</td><td>Current condition of the down woody material.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>SO</td><td>Sound</td><td></td></tr>
<tr><td>RO</td><td>Rotten</td><td></td></tr>
<tr><td>1</td><td>Decay class 1</td><td>CSE</td></tr>
<tr><td>2</td><td>Decay class 2</td><td>CSE</td></tr>
<tr><td>3</td><td>Decay class 3</td><td>CSE</td></tr>
<tr><td>4</td><td>Decay class 4</td><td>CSE</td></tr>
<tr><td>5</td><td>Decay class 5</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>DEPTH</td><td>N(6,3)</td><td>First measurement of the depth of the duff and/or litter layer. CSE data records only the depth of the duff layer. Stored in inches.</td></tr>
<tr><td>DEPTH2</td><td>N(6,3)</td><td>Second measurement of the depth of the duff/litter layer. Stored in inches.</td></tr>
<tr><td>DIAMETER</td><td>N(6,3)</td><td>The cross-sectional width of a down woody piece, measured through the center of the stem (measured at intersection with transect for FIA data). Stored in inches.</td></tr>
<tr><td>DIAMETER_LARGE_END</td><td>N(6,3)</td><td>The cross-sectional width of a down woody piece measured through the large end of the piece. Stored in inches.</td></tr>
<tr><td>DIAMETER_METHOD</td><td>VC(2)</td><td>Method used to measure the diameter.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>M</td><td>Measured</td><td></td></tr>
<tr><td>E</td><td>Estimated</td><td>CSE</td></tr>
<tr><td>C</td><td>Calculated</td><td></td></tr>
</table></td></tr>
<tr><td>DIAMETER_SMALL_END</td><td>N(6,3)</td><td>The cross-sectional width of a down woody piece measured through the small end of the piece. Stored in inches.</td></tr>
<tr><td>FUEL_BED_DEPTH</td><td>N(6,3)</td><td>Vertical distance from the top of the duff layer to the highest dead particle. Stored in inches.</td></tr>
</table>

NRV_DOWN_WOODY_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>HIGHCOUNT_REASON</td><td>VC(1)</td><td>Explanation of why a transect contains more than 100 pieces of fine woody debris.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Count is not unusually high.</td><td>FIA</td></tr>
<tr><td>1</td><td>High count is due to an overall high density of pieces across the transect</td><td>FIA</td></tr>
<tr><td>2</td><td>Wood rat's nest located on transect</td><td>FIA</td></tr>
<tr><td>3</td><td>Tree or shrub lying across transect</td><td>FIA</td></tr>
<tr><td>4</td><td>Other reason.</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>HISTORY</td><td>VC(2)</td><td>Explanation of why the coarse woody debris piece is on the ground.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Result of natural causes (CORE).</td><td>FIA</td></tr>
<tr><td>2</td><td>Result of major harvest activity (cut down or bulldozed) (CORE).</td><td>FIA</td></tr>
<tr><td>2</td><td>Result of major RECENT harvest activity (≤ 15 yrs old) (NW).</td><td>FIA</td></tr>
<tr><td>3</td><td>Result of an incidental harvest (such as firewood cutting) (CORE).</td><td>FIA</td></tr>
<tr><td>3</td><td>Result of OLDER harvest activity (> 15 yrs old) (PNW).</td><td>FIA</td></tr>
<tr><td>4</td><td>Result of an incidental harvest (such as firewood utting). (PNW)</td><td>FIA</td></tr>
<tr><td>5</td><td>Exact reason unknown (PNW).</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>HOLLOW_CODE</td><td>VC(1)</td><td>Is the piece hollow?
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>Y</td><td>Yes, the piece is hollow.</td><td>FIA</td></tr>
<tr><td>N</td><td>No, the piece is not hollow.</td><td>FIA</td></tr>
</table></td></tr>
</table>

NRV_DOWN_WOODY_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>HOLLOW_PERCENT</td><td>N(3)</td><td>Percent of the log which is hollow</td></tr>
<tr><td>HUMUS_DEPTH</td><td>N(6,3)</td><td>Depth of the humus layer. Stored in inches.</td></tr>
<tr><td>LENGTH</td><td>N(6,3)</td><td>Measure of the greatest dimension of a down woody piece. Stored in feet.</td></tr>
<tr><td>LITTER_1</td><td>N(6,3)</td><td>First layer of litter.</td></tr>
<tr><td>LITTER_2</td><td>N(6,3)</td><td>Second layer of litter.</td></tr>
<tr><td>MAPCOND_CN</td><td>VC(34)</td><td>Foreign key to Nrv_fia_mapped_conditions.</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database ID where the record was modified.</td></tr>
<tr><td>NO_OF_PIECES</td><td>N(3)</td><td>Number of like individuals (e.g. number of pieces in a size class).</td></tr>
<tr><td>PILE_AZIMUTH</td><td>N(3)</td><td>Azimuth form plot center to a pile of down woody material.</td></tr>
<tr><td>PILE_DENSITY</td><td>N(3)</td><td>The percent of the pile that consists of wood. Things like air, soil, rock, and plants should be factored out of the estimate. Estimate to the nearest ten percent.</td></tr>
<tr><td>PILE_HEIGHT_1</td><td>N(5,2)</td><td>Height of one end of the pile. Estimated to the nearest foot.</td></tr>
<tr><td>PILE_HEIGHT_2</td><td>N(5,2)</td><td>Height of one end of the pile. Estimated to the nearest foot.</td></tr>
<tr><td>PILE_LENGTH_1</td><td>N(5,2)</td><td>Length of one side of the pile. Estimated to the nearest foot.</td></tr>
<tr><td>PILE_LENGTH_2</td><td>N(5,2)</td><td>Length of one side of the pile. Estimated to the nearest foot.</td></tr>
<tr><td>PILE_SHAPE</td><td>VC(1)</td><td>Record a 1-digit code indicating the shape of the pile. The four shapes are shown in Figure 14-14 of the P3 Field Manual. This code will either be 1, 2, 3, or 4.</td></tr>
<tr><td>PILE_WIDTH_1</td><td>N(5,2)</td><td>Width of one side of the pile. Estimated to the nearest foot.</td></tr>
<tr><td>PILE_WIDTH_2</td><td>N(5,2)</td><td>Width of one side of the pile. Estimated to the nearest foot.</td></tr>
<tr><td>RESIDUE_PILE</td><td>VC(1)</td><td>PNW fuels down woody debris variable that indicates whether a residue pile intersects the fine woody debris transect segment.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>Y</td><td>Yes, it intersects the transect</td><td>FIA</td></tr>
<tr><td></td><td>No, it does not intersect the transect</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>ROW_ACCESS_CODE</td><td>VC(6)</td><td>Control field to support row level access.</td></tr>
<tr><td>SELCRIT_CN</td><td>VC(34)</td><td>Foreign key to Nrv_selection_criteria.</td></tr>
<tr><td>SLOPE_DISTANCE</td><td>N(6,3)</td><td>The slope distance, from the subplot center to the point where the transect intersects the longitudinal center of the piece.</td></tr>
<tr><td>SLOPE_ORIENTATION</td><td>VC(1)</td><td>The orientation of the piece on the slope.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>H</td><td>Horizontal</td><td>FIA</td></tr>
<tr><td>V</td><td>Vertical</td><td>FIA</td></tr>
<tr><td>A</td><td>Across</td><td>FIA</td></tr>
<tr><td>F</td><td>Flat</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_DOWN_WOODY_MEASUREMENTS (cont.)

Name	Size	Description
SPECIES_SYMBOL	VC(8)	The NRCS PLANTS code of the species represented by this record. For example, PSME = *Pseudotsuga menziesii*. Constrained by values in the appropriate TAXA table.
SUBGROUP_CODE	VC(4)	A 'sub-stratification' of the major sample unit, used to categorize down woody records, within the setting, into different conditions.
SUBSAMPLE	VC(2)	Subsample number.
TAG_ID	VC(5)	Unique number physically attached or assigned to a down log.
VOLUME	N(10,3)	Estimated total wood volume contained in a pre-defined size class. This field is not intended to store calculated data. Stored in cubic feet per acre.
WEIGHT	N(8,3)	Estimated mass of a pre-defined size class. This field is not intended to store calculated data. Stored in tons per acre.

NRV_FIA_CONDITION_PROPORTIONS

This table contains mapped condition proportions by sample type and mapped condition.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
MAPCOND_CN ***Required***	VC(34)	Foreign key to Nrv_fia_mapped_conditions.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
PREV_MAPCOND_CN	VC(34)	Foreign key to NRV_FIA_MAPPED_CONDITIONS.CN identifying the condition of previous measurement.
PROPORTION	N(5,4)	Proportion of the cluster plot, subplot, macro plot, annular plot, or hectare plot in a specific mapped condition. Valid values are 0.000 to 1.000.

NRV_FIA_CONDITION_PROPORTIONS (cont.)

Name	Size	Description
PROPORTION_BASIS	VC(12)	Proportion basis: **Code** / **Description** / **Use** SUB / Sub-plot / FIA MACRO / Macro-plot / FIA MICRO / Micro-plot / FIA HECTARE / Hectare plot / FIA CLUSTER / Cluster plot / FIA
PROPORTION_TYPE	VC(6)	The type of proportion reported: **Code** / **Description** / **Use** ALL / See FIADB user's guide version 1.7 or greater for a complete definition / FIA CHNG / See FIADB user's guide version 1.7 or greater for a complete definition / FIA CURR / See FIADB user's guide version 1.7 or greater for a complete definition / FIA UNADJ / See FIADB user's guide version 1.7 or greater for a complete definition / FIA SPEC / Special. This value is used only in special cases where other values fail to accurately describe the proportion type. Currently not defined in FIADB user's guide version 1.7 / FIA
SUBTYP_PROP_CHNG	N(5,4)	Proportion change of subplot condition between previous to current inventory

NRV_FIA_DWM_CALCS

This table contains the Forest Inventory and Analysis down woody measurement calculations.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
DWM_CN ***Required***	VC(34)	Foreign key to Nrv_down_woody_measurements
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.

NRV_FIA_DWM_CALCS (cont.)

Name	Size	Description
CREATED_DATE ***Required***	DATE	The date the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
BIOMASS_POUNDS_TRAN	NUMBER	Value that when divided by transect length will produce biomass in pounds per acre
CARBON	NUMBER	Logs/Piles carbon weight in pounds
CARBON_POUNDS_TRAN	NUMBER	Value that when divided by transect length will produce carbon in pounds per acre
CUBIC_FEET_TRAN	NUMBER	Value that when divided by transect length will produce cubic feet per acre
DESIGN_TYPE	VC(2)	Identifies P2 or P3 plot design
DRYBIOT	NUMBER	Logs/Piles dry weight in pounds
LOG_COVER_PCT	NUMBER	Percent cover represented by each log
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
PER_ACRE_COND	NUMBER	Logs/Piles per acre based on condition transect length actually measured
PER_ACRE_PLOT	NUMBER	Logs/Piles per acre based on plot transect length actually measured
PER_ACRE_UNADJ	NUMBER	Logs/Piles per acre based on target plot transect length
TRANSECT_LENGTH_COND	NUMBER	Sum of transect lengths in condition
TRANSECT_LENGTH_PLOT	NUMBER	Sum of transect lengths in measured and nonforest conditions on plot
TRANSECT_LENGTH_UNADJ	NUMBER	Sum of transect lengths in all conditions including unmeasured on target plot design
VOLCFGRS	NUMBER	Logs/Piles Cubic foot volume

NRV_FIA_MAPPED_CONDITIONS

This table contains columns describing FIA mapped conditions.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.

NRV_FIA_MAPPED_CONDITIONS (cont.)

Name	Size	Description
ARTIFICIAL_REGEN_SPECIES	VC(8)	The NRCS species symbol of the predominant tree species for which evidence exists of artificial regeneration in the stand.
ASPECT	N(3)	The azimuth indicating the direction of slope for the land surface of the condition class. The direction in degrees from magnetic north of drainage for most of the condition, recorded as the azimuth of this direction. North is recorded as 360. When slope is zero, there is no aspect and this item is set to zero. Before 2000, the field crew measured condition aspect. Beginning in 2000, aspect is collected on subplots but no longer collected for conditions. For plots taken after 2000, the aspect from the subplot representing the greatest percentage of the condition will be assigned as a surrogate.
CANOPY_CLOSURE	N(3)	The percentage of crown cover, to the nearest 1 percent of all tally tree species greater than 1.0" DBH/DRC.
CARBON_DOWN_DEAD	N(13,6)	Carbon in down dead. Carbon mass (tons per acre) of woody material on the ground larger than 3 inches in diameter as well as stumps and their roots greater than 3 inches. Estimated from models based on region, forest type and live tree carbon density (Smith and Heath 2008). Down woody material (DWM) data collected in some FIA inventories were not included in this estimate.
CARBON_LITTER	N(13,6)	Carbon in litter. Carbon mass (tons per acre) of organic material on the floor of the forest, including fine woody debris, humus, and fine roots in the organic forest floor layer above mineral soil. Estimated from models based on region, forest type and stand age (Smith and Heath 2002). Litter data collected in some FIA inventories were not included in this estimate.
CARBON_SOIL_ORG	N(13,6)	Carbon in organic soil. Carbon mass (tons per acre) in fine organic material below the soil surface to a depth of 1 meter. Does not include roots. Estimated from models based on region and forest type (Smith and Heath 2008). Soil data collected in some FIA inventories were not included in this estimate.
CARBON_STANDING_DEAD	N(13,6)	Carbon in standing dead. For the periodic inventories, carbon mass (tons per acre) in standing dead trees, including coarse roots is estimated from models based on forest type and live tree carbon (this also applies to all estimates for 1 to 5 inch trees) (Jenkins and others 2003, Smith and Heath in preparation). This field is blank (null) for annual inventories where individual-tree data are available. For annual inventories carbon density (tons per acre) can be calculated using tree-level data.
CARBON_UNDERSTORY_AG	N(13,6)	Carbon in understory aboveground. Carbon mass (tons per acre) in the aboveground portions of seedlings, shrubs, and bushes. Estimated from models based on region, forest type and live tree carbon density (Smith and Health 2008).

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CARBON_UNDERSTORY_BG</td><td>N(13,6)</td><td>Carbon in understory belowground. Carbon mass (tons per acre) in the belowground portions of seedlings, shrubs, and bushes. Estimated from models based on region, forest type and live tree carbon density (Smith and Heath 2008).</td></tr>
<tr><td>CONDITION_DESCRIPTION</td><td>VC(80)</td><td>Describes the mapped condition.</td></tr>
<tr><td>CONDITION_ID</td><td>N(2)</td><td>On a plot, this is a unique identifying number for each condition class. At the time of the plot establishment, the condition class at plot center (the center of subplot 1) is designated condition class 1. Other condition classes are assigned numbers sequentially at the time each condition class is delineated. Owner class and land class define the condition. Differences in broad forest type, stand size, stand origin, and stand density further define condition for forestland.</td></tr>
<tr><td>CONDITION_ID_PREVIOUS</td><td>N(5)</td><td>The condition within the plot on which this condition occurred at the previous inventory.</td></tr>
<tr><td>CONDITION_STATUS</td><td>VC(2)</td><td>The status of the condition.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Accessible forest land</td><td>FIA</td></tr>
<tr><td>2</td><td>Non-forest land</td><td>FIA</td></tr>
<tr><td>3</td><td>Non-census water</td><td>FIA</td></tr>
<tr><td>4</td><td>Census water</td><td>FIA</td></tr>
<tr><td>5</td><td>Nonsampled</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>CONDITION_STATUS_CHANGE</td><td>VC(1)</td><td>This is a RMRS variable. See RMRS Field manual for a definition of the four valid codes: 1, 2, 3, and 4.</td></tr>
<tr><td>DAMAGE_INDEX</td><td>N(5,2)</td><td>Number from 0 to 100 indicating the relative tree damage for the condition (Suggested by Manfred Mielke 11/20/2001. Manfred has provided the SAS code for generating this value).</td></tr>
<tr><td>EVIDENCE_OF_FIRE</td><td>VC(1)</td><td>This is a PNW variable.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>Y</td><td>The condition class has evidence of a past or present fire occurrence</td><td>PNW</td></tr>
<tr><td>N</td><td>No evidence of fire</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>EV_CODE</td><td>VC(10)</td><td>The forest type assigned by the field crew (from Appendix D of the FIADB Users Manual Version 1.0) that best describes the species with the plurality of stocking for all live trees in the condition class that are not overtopped.</td></tr>
<tr><td>EV_CODE_CALC</td><td>VC(10)</td><td>Computed. Forest type using the FIA algorithm</td></tr>
<tr><td>EV_REF_CODE</td><td>VC(10)</td><td>Always set to 'FIADB'</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>FIA_LAND_CLASS</td><td>VC(3)</td><td>This is a PNW variable.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>120</td><td>Timberland</td><td>PNW</td></tr>
<tr><td>141</td><td>Other forest-rocky</td><td>PNW</td></tr>
<tr><td>142</td><td>Other forest-unsuitable site</td><td>PNW</td></tr>
<tr><td>143</td><td>Other forest-pinion-juniper</td><td>PNW</td></tr>
<tr><td>144</td><td>Other forest-oak</td><td>PNW</td></tr>
<tr><td>145</td><td>Other forest chaparral</td><td>PNW</td></tr>
<tr><td>146</td><td>Other forest - unsuitable site</td><td>PNW</td></tr>
<tr><td>148</td><td>Other forest cypress</td><td>PNW</td></tr>
<tr><td>149</td><td>Other forest low productivity</td><td>PNW</td></tr>
<tr><td>150</td><td>Other forest - curlleaf mountain mahogany</td><td>PNW</td></tr>
<tr><td>161</td><td>Cropland</td><td>PNW</td></tr>
<tr><td>162</td><td>Improved pasture</td><td>PNW</td></tr>
<tr><td>163</td><td>Natural range land</td><td>PNW</td></tr>
<tr><td>164</td><td>Farmland</td><td>PNW</td></tr>
<tr><td>165</td><td>Marsh</td><td>PNW</td></tr>
<tr><td>166</td><td>Cultural non-forest stringer</td><td>PNW</td></tr>
<tr><td>167</td><td>Urban</td><td>PNW</td></tr>
<tr><td>168</td><td>Naturally non-vegetated</td><td>PNW</td></tr>
<tr><td>169</td><td>Christmas tree lands</td><td>PNW</td></tr>
<tr><td>192</td><td>Water</td><td>PNW</td></tr>
</table>
</td></tr>
<tr><td>FOREST_ADMIN</td><td>VC(2)</td><td>Administrative forest code. Identifies the administrative unit (Forest Service Region and National Forest) in which the condition is located. If the Forest Service does not administer the land the value is set to –1 (See Appendix E of the FIADB Users Manual for complete list of codes).</td></tr>
<tr><td>GROWING_STOCK</td><td>N(7,4)</td><td>Stocking, in percent, of the condition by growing stock trees, including seedlings.</td></tr>
<tr><td>HAZARD_STATUS</td><td>VC(1)</td><td>This is a RMRS variable that describes why the condition is considered hazardous.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Physical restrictions (cliffs, bears, bees, etc.)</td><td>RMS</td></tr>
<tr><td>1</td><td>Time constraints</td><td>RMS</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>INDUSTRIAL_STATUS</td><td>VC(1)</td><td>The status of the owner with regard to being considered industrial as determined by whether or not they own and operate a primary wood processing plant.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Land is not owned by industrial owner with a wood processing plant.</td><td>FIA</td></tr>
<tr><td>1</td><td>Land is owned by industrial owner with wood processing plant.</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>LIVE_BASAL_AREA</td><td>N(9,4)</td><td>Basal area of all live trees. Basal area in square-feet of all live trees over 1 inch DBH.</td></tr>
<tr><td>LIVE_STOCKING</td><td>N(7,4)</td><td>All live stocking code. Stocking, in percent, of the condition by live trees including seedlings.</td></tr>
<tr><td>MIXED_CONIFER_SITE</td><td>VC(1)</td><td>This is a PNW variable. Record a 1-digit code indicating if the condition is a mixed conifer site. To classify as a mixed conifer site the condition class must be capable of being stocked with greater than 70% conifers and one of the following must be true: the PNW Field Manual then goes on to describe four specific conditions on page 90.</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who last modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was last modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database server ID where the record was last modified.</td></tr>
<tr><td>NFS_STRATUM</td><td>VC(10)</td><td>A vegetation stratification system usually involving the delineation of land by homogenous combinations of vegetation, density, size class and structure.</td></tr>
<tr><td>NONFOREST_YEAR</td><td>N(4)</td><td>An estimate of the year that a previously forested condition was converted to a non-forest condition.</td></tr>
<tr><td>NONSAMPLED_REASON</td><td>VC(2)</td><td>For conditions that cannot be sampled, and are wholly or partially within the FIA sampling population, record one of the following reasons (collected when NRV_FIA_MAPPED_CONDITIONS.CONDITIONS_STATUS = 5).

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Outside U.S. boundary</td><td>FIA</td></tr>
<tr><td>2</td><td>Denied access area</td><td>FIA</td></tr>
<tr><td>3</td><td>Hazardous situation</td><td>FIA</td></tr>
<tr><td>4</td><td>Time limitation</td><td>FIA</td></tr>
<tr><td>5</td><td>Botched data file</td><td>FIA</td></tr>
<tr><td>6</td><td>Plot lost</td><td>FIA</td></tr>
<tr><td>7</td><td>Plot in wrong location</td><td>FIA</td></tr>
<tr><td>8</td><td>Skipped visit</td><td>FIA</td></tr>
<tr><td>9</td><td>Dropped intensification</td><td>FIA</td></tr>
<tr><td>10</td><td>Other</td><td>FIA</td></tr>
<tr><td>11</td><td>Ocean</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>NONSTOCKED_EV_CODE</td><td>VC(10)</td><td>This is a RMRS variable. Nonstocked Forest Type. Record the forest type that best describes the past forest type when forest type is coded 999.</td></tr>
<tr><td>OWNER</td><td>VC(4)</td><td>Record the owner class that best corresponds to the ownership (or the managing agency for public lands) of the land in the condition class. This column is constrained by the codes in Nrv_owner_agency_codes.</td></tr>
<tr><td>OWNER_GROUP</td><td>VC(2)</td><td>The owner group code identifying the ownership (or the managing Agency for public lands) of the land in the condition class.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Forest Service</td><td>FIA</td></tr>
<tr><td>2</td><td>Other Federal</td><td>FIA</td></tr>
<tr><td>3</td><td>State and Local Government</td><td>FIA</td></tr>
<tr><td>4</td><td>Private</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>PAST_NONFOREST_LAND_USE</td><td>VC(2)</td><td>Past nonforest/inaccessible land use code. For conditions classified as nonforest or inaccessible during the previous inventory but classified as accessible forestland during current inventory. Indicates the kind of land use occurring at the previous inventory.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>10</td><td>Agricultural land</td><td>FIA</td></tr>
<tr><td>11</td><td>Cropland</td><td>FIA</td></tr>
<tr><td>12</td><td>Pasture (improved through cultural practices)</td><td>FIA</td></tr>
<tr><td>13</td><td>Idle farmland</td><td>FIA</td></tr>
<tr><td>14</td><td>Orchard</td><td>FIA</td></tr>
<tr><td>15</td><td>Christmas tree plantation</td><td>FIA</td></tr>
<tr><td>20</td><td>Rangeland</td><td>FIA</td></tr>
<tr><td>30</td><td>Developed</td><td>FIA</td></tr>
<tr><td>31</td><td>Cultural (business, residential, other intense human activity)</td><td>FIA</td></tr>
<tr><td>32</td><td>Rights-of-way (improved road, railway, power line)</td><td>FIA</td></tr>
<tr><td>33</td><td>Recreation (park, golf course, ski run</td><td>FIA</td></tr>
<tr><td>40</td><td>Other (undeveloped beach, marsh, bog, non-census water)</td><td>FIA</td></tr>
<tr><td>90</td><td>Not sampled</td><td>FIA</td></tr>
<tr><td>91</td><td>Census water</td><td>FIA</td></tr>
<tr><td>92</td><td>Denied access</td><td>FIA</td></tr>
<tr><td>93</td><td>Hazardous</td><td>FIA</td></tr>
<tr><td>94</td><td>Not in sample</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>PHYSIOGRAPHIC_CLASS</td><td>VC(3)</td><td>Foreign key to Nrv_physiographic_classes. The physiographic class of the subplot: landform, topographic position, and soil generally determine the physiographic class. Detailed definitions can be found in PNW Field Guide pg. 43-44.</td></tr>
<tr><td>PRESENT_LAND_USE</td><td>VC(2)</td><td>
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>11</td><td>Undeveloped tree land</td><td>FIA</td></tr>
<tr><td>12</td><td>Developed rural tree land</td><td>FIA</td></tr>
<tr><td>13</td><td>Developed urban tree land</td><td>FIA</td></tr>
<tr><td>21</td><td>Non-sampled urban tree land</td><td>FIA</td></tr>
<tr><td>22</td><td>Christmas tree plantations</td><td>FIA</td></tr>
<tr><td>23</td><td>Orchards</td><td>FIA</td></tr>
<tr><td>25</td><td>Other non-sampled tree land</td><td>FIA</td></tr>
<tr><td>61</td><td>Shrub cover</td><td>FIA</td></tr>
<tr><td>62</td><td>Natural herbaceous/grass cover</td><td>FIA</td></tr>
<tr><td>63</td><td>Crop cover</td><td>FIA</td></tr>
<tr><td>64</td><td>Improved pasture</td><td>FIA</td></tr>
<tr><td>65</td><td>Natural crest or alpine tundra</td><td>FIA</td></tr>
<tr><td>66</td><td>Barren</td><td>FIA</td></tr>
<tr><td>71</td><td>Cultural developments - sheds, yards, barns, pump-houses, trailers, houses, etc.</td><td>FIA</td></tr>
<tr><td>72</td><td>Maintained roads and rights-of-way, improved roads, railroads, power lines, pipe lines, etc.</td><td>FIA</td></tr>
<tr><td>73</td><td>Other non-tree land (urban)</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>PRESENT_NONFOREST_LAND_USE</td><td>VC(2)</td><td>Present non-forest/inaccessible land use code. For conditions classified as nonforest or inaccessible during the previous inventory but classified as accessible forestland during current inventory. Indicates the kind of land use occurring at the previous inventory.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>10</td><td>Agricultural land</td><td>FIA</td></tr>
<tr><td>11</td><td>Cropland</td><td>FIA</td></tr>
<tr><td>12</td><td>Pasture (improved through cultural practices)</td><td>FIA</td></tr>
<tr><td>13</td><td>Idle farmland</td><td>FIA</td></tr>
<tr><td>14</td><td>Orchard</td><td>FIA</td></tr>
<tr><td>15</td><td>Christmas tree plantation</td><td>FIA</td></tr>
<tr><td>20</td><td>Rangeland</td><td>FIA</td></tr>
<tr><td>30</td><td>Developed</td><td>FIA</td></tr>
<tr><td>31</td><td>Cultural (business, residential, other intense human activity)</td><td>FIA</td></tr>
<tr><td>32</td><td>Rights-of-way (improved road, railway, power line)</td><td>FIA</td></tr>
<tr><td>33</td><td>Recreation (park, golf course, ski run</td><td>FIA</td></tr>
<tr><td>40</td><td>Other (undeveloped beach, marsh, bog, non-census water)</td><td>FIA</td></tr>
<tr><td>90</td><td>Not sampled</td><td>FIA</td></tr>
<tr><td>91</td><td>Census water</td><td>FIA</td></tr>
<tr><td>92</td><td>Denied access</td><td>FIA</td></tr>
<tr><td>93</td><td>Hazardous</td><td>FIA</td></tr>
<tr><td>94</td><td>Not in sample</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>PV_CODE</td><td>VC(10)</td><td>Potential vegetation for this condition. A partial list of codes is located in Nrv_pv_cover_types. This column is not constrained by this set of codes.</td></tr>
<tr><td>PV_CODE_SECONDARY</td><td>VC(10)</td><td>Secondary potential vegetation for this condition. A partial list of codes is located in Nrv_pv_cover_types. This column is not constrained by this set of codes.</td></tr>
<tr><td>PV_REF_CODE</td><td>VC(10)</td><td>Publication that documents specific pv_codes. This column is constrained by the codes in Nrv_cover_references.</td></tr>
<tr><td>PV_REF_CODE_SECONDARY</td><td>VC(10)</td><td>Publication that documents specific pv_code_secondary. This column is constrained by the codes in Nrv_cover_references.</td></tr>
<tr><td>REGION_ADMIN</td><td>VC(2)</td><td>Administrative Region number (National Forest System)</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>RESERVE_CLASS</td><td>VC(1)</td><td>Core Variable. The reserved designation for the condition. Reserved land is withdrawn by law(s) prohibiting the management of land for the production of wood products.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Not reserved</td><td>FIA</td></tr>
<tr><td>1</td><td>Reserved</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>RPA_LAND_CLASS</td><td>VC(2)</td><td>
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Accessible forest</td><td>FIA</td></tr>
<tr><td>2</td><td>Nonforest</td><td>FIA</td></tr>
<tr><td>3</td><td>Noncensus water</td><td>FIA</td></tr>
<tr><td>4</td><td>Census water</td><td>FIA</td></tr>
<tr><td>5</td><td>Denied access</td><td>FIA</td></tr>
<tr><td>6</td><td>Hazardous</td><td>FIA</td></tr>
<tr><td>7</td><td>Not in the sample</td><td></td></tr>
</table>
</td></tr>
<tr><td>SETTING_ORIGIN</td><td>VC(2)</td><td>Source of vegetation on the setting. Synonymous with Stand Origin.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Natural vegetation - no evidence of artificial regeneration.</td><td></td></tr>
<tr><td>2</td><td>Evidence of artificial regeneration - less than 40%.</td><td></td></tr>
<tr><td>3</td><td>Evidence of artificial regeneration - 40% or more.</td><td></td></tr>
<tr><td>4</td><td>Harvested recently - regeneration not yet evident.</td><td></td></tr>
<tr><td>5</td><td>Evidence of artificial regeneration – percentage not estimated.</td><td></td></tr>
<tr><td>7</td><td>Forestland encroachment.</td><td></td></tr>
</table>
</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SITE_PRODUCTIVITY</td><td>VC(2)</td><td>Site productivity class code. A classification of forestland in terms of inherent capacity to grow crops of industrial wood. Identifies the potential growth in cubic feet/acre/year and is based on the culmination of mean annual increment of fully stocked natural stands.

<table>
<tr><th>Code</th><th>Site productivity (cubic feet/acre/year)</th><th>Use</th></tr>
<tr><td>1</td><td>225+</td><td>FIA</td></tr>
<tr><td>2</td><td>165-224</td><td>FIA</td></tr>
<tr><td>3</td><td>120-164</td><td>FIA</td></tr>
<tr><td>4</td><td>85-119</td><td>FIA</td></tr>
<tr><td>5</td><td>50-84</td><td>FIA</td></tr>
<tr><td>6</td><td>20-49</td><td>FIA</td></tr>
<tr><td>7</td><td>0-19</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>SIZE_CLASS</td><td>VC(1)</td><td>Code for stand-size class assigned by the field crew. A classification of the predominant (based on stocking) diameter class of live trees within the condition.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Nonstocked</td><td>FIA</td></tr>
<tr><td>1</td><td>< 5 inches</td><td>FIA</td></tr>
<tr><td>2</td><td>5.0 - 8.9 inches (softwoods) or 5.0 - 10.9 inches (hardwoods)</td><td>FIA</td></tr>
<tr><td>3</td><td>9.0 - 19.9 inches (softwoods) or 11.0 - 19.9 inches (hardwoods)</td><td>FIA</td></tr>
<tr><td>4</td><td>20.0 - 39.9 inches</td><td>FIA</td></tr>
<tr><td>5</td><td>40.0 + inches</td><td>FIA</td></tr>
<tr><td>6</td><td>Chaparral (FIA field manuals 1.4 – 1.7)
Non-tally cover species (FIA field manuals > 1.7)</td><td>FIA</td></tr>
</table>

More thorough definitions of each size class can be found in the FIADB Users Manual Version 1.0 (GTR NC-218) page 26-27.</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SIZE_CLASS_CALC</td><td>VC(1)</td><td>Computed. Stand-size class using an algorithm. A classification of the predominant (based on stocking) diameter class of live trees within the condition. Large diameter trees are at least 11.0 inches diameter for hardwoods and at least 9.0 inches diameter for softwoods. Medium diameter trees are at least 5.0 inches diameter but not as large as large diameter trees. Small diameter trees are less than 5.0 inches diameter.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Large diameter – stands with an all live stocking value of at least 10 (base 100); with more than 50 % of the stocking in medium and large diameter trees; and with the stocking of large diameter trees equal to or greater than the stocking of medium diameter trees.</td><td>FIA</td></tr>
<tr><td>2</td><td>Medium diameter – stands with an all live stocking value of at least 10 (base 100); with more than 50 % of the stocking in medium and large diameter trees; and with the stocking of large diameter trees less than the stocking of medium diameter trees.</td><td>FIA</td></tr>
<tr><td>3</td><td>Small diameter – stands with an all live stocking value of at least (base 100) on which at least 50 % of the stocking is in small diameter trees.</td><td>FIA</td></tr>
<tr><td>4</td><td>Chaparral – forestland with all live stocking value less than 10 and at least 5 % cover by species that make up chaparral communities.</td><td>FIA</td></tr>
<tr><td>5</td><td>Nonstocked – forestland with all live stocking value less than 10.</td><td>FIA</td></tr>
</table>

Definitions from the FIADB Users Manual Version 1.0 (GTR NC-218) page 25-26.</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SIZE_OF_CONDITION</td><td>N(4)</td><td>RMRS variable. The continuous size of the condition class. Use aerial photographs for the field location to aid in determining the size of the condition.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>1-5 acres</td><td>RMRS</td></tr>
<tr><td>2</td><td>6-10 acres</td><td>RMRS</td></tr>
<tr><td>3</td><td>11-20 acres</td><td>RMRS</td></tr>
<tr><td>4</td><td>21-40 acres</td><td>RMRS</td></tr>
<tr><td>5</td><td>41-160 acres</td><td>RMRS</td></tr>
<tr><td>6</td><td>161-640 acres</td><td>RMRS</td></tr>
<tr><td>7</td><td>1-5 sq. miles</td><td>RMRS</td></tr>
<tr><td>8</td><td>> 5 sq. miles</td><td>RMRS</td></tr>
<tr><td>9</td><td>Linear feature (includes forest stringers at least 120-feet wide, riparian areas and streams at least 30-feet wide, improved roads, etc.)</td><td>RMRS</td></tr>
</table>
</td></tr>
<tr><td>SLOPE</td><td>N(3)</td><td>The average percent slope within the condition. Valid values are 0 through 200. Before 2000, the field crew measured condition slope. Beginning in 2000, slope is collected on subplots but no longer collected for conditions. For plots taken after 2000, the slope from the subplot representing the greatest percentage of the condition will be assigned as a surrogate.</td></tr>
<tr><td>SOIL DEPTH</td><td>N(3)</td><td>Describes soil depth within each forestland condition class. Required for all forest condition classes.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>< 20 inches</td><td>PNW</td></tr>
<tr><td>2</td><td>≥ 20 inches</td><td>PNW</td></tr>
</table>
</td></tr>
<tr><td>STAND_AGE</td><td>N(4)</td><td>The average total age, to the nearest year, of the trees (plurality of all live trees not overtopped) in the predominant stand size class of the condition, determined using local procedures.</td></tr>
<tr><td>STAND_AGE_FIELD</td><td>N(4)</td><td>The stand age collected in the field.</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>STAND_CONDITION</td><td>VC(2)</td><td>The condition of the stand within forest condition classes. Stand condition is defined as "the size, density, and species composition of a plant community following disturbance and at various time intervals after disturbance. More thorough code definitions can be found on page 87 of the PNW field manual.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Non applicable</td><td>PNW</td></tr>
<tr><td>1</td><td>Grass-forbs</td><td>PNW</td></tr>
<tr><td>2</td><td>Shrub</td><td>PNW</td></tr>
<tr><td>3</td><td>Open sapling-poletimber</td><td>PNW</td></tr>
<tr><td>4</td><td>Closed sapling, pole, sawtimber</td><td>PNW</td></tr>
<tr><td>5</td><td>Open sawtimber</td><td>PNW</td></tr>
<tr><td>6</td><td>Large sawtimber</td><td>PNW</td></tr>
<tr><td>7</td><td>Old-growth</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>STAND_STRUCTURE</td><td>VC(2)</td><td>PNW variable. The overall structure of the stand.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Even-aged single-storied</td><td>PNW</td></tr>
<tr><td>2</td><td>Even-aged two-storied</td><td>PNW</td></tr>
<tr><td>3</td><td>Uneven-aged</td><td>PNW</td></tr>
<tr><td>4</td><td>Mosaic</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>STOCKABILITY_INDICATOR_SET</td><td>VC(1)</td><td>PNW variable. The plant indicator list (Set 1 or 2) associated with an accessible forestland condition class in Douglas, Jackson, or Josephine counties. Valid values are 1 and 2.</td></tr>
<tr><td>STUMPS_PRESENT</td><td>VC(1)</td><td>PNW variable.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>Y</td><td>The condition class has been harvested for wood production in the past or present (any signs of past cutting such as old stumps).</td><td>PNW</td></tr>
<tr><td>N</td><td>There is no evidence of past cutting or management</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>SURVEY_TYPE</td><td>VC(2)</td><td>This column will contain either "P2" or "P3" to identify records in this table to one of these two protocols. But until every plot (P2 and P3) occur simultaneously, the possibility of one crew assigning two conditions to the plot and the other crew assigning 2, less, or more conditions to the plot will continue to be problematic.</td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>TOPOGRAPHIC_POSITION</td><td>VC(1)</td><td>PNW variable. The topographic position for each condition.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Ridge top or mountain peak over 130 feet</td><td>PNW</td></tr>
<tr><td>2</td><td>Narrow ridge top or peak less than 130 feet wide</td><td>PNW</td></tr>
<tr><td>3</td><td>Side hill – upper 1/3</td><td>PNW</td></tr>
<tr><td>4</td><td>Side hill – middle 1/3</td><td>PNW</td></tr>
<tr><td>5</td><td>Side hill – lower 1/3</td><td>PNW</td></tr>
<tr><td>6</td><td>Canyon bottom less than 660 feet wide</td><td>PNW</td></tr>
<tr><td>7</td><td>Bench, terrace or dry flat</td><td>PNW</td></tr>
<tr><td>8</td><td>Broad alluvial flat over 660 feet wide</td><td>PNW</td></tr>
<tr><td>9</td><td>Swamp or wet flat</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>TREATMENT_OPPORTUNITY</td><td>VC(2)</td><td>Treatment opportunity class code. Identifies the physical opportunity to improve stand conditions by applying management practices. Determined only for timberland.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Regeneration without site preparation</td><td>FIA</td></tr>
<tr><td>2</td><td>Regeneration with site preparation</td><td>FIA</td></tr>
<tr><td>3</td><td>Stand conversion</td><td>FIA</td></tr>
<tr><td>4</td><td>Thinning seedlings and saplings</td><td>FIA</td></tr>
<tr><td>5</td><td>Thinning poletimber</td><td>FIA</td></tr>
<tr><td>6</td><td>Other stocking control</td><td>FIA</td></tr>
<tr><td>7</td><td>Other intermediate treatments</td><td>FIA</td></tr>
<tr><td>8</td><td>Clear-cut harvest</td><td>FIA</td></tr>
<tr><td>9</td><td>Partial cut harvest</td><td>FIA</td></tr>
<tr><td>10</td><td>Salvage harvest</td><td>FIA</td></tr>
<tr><td>11</td><td>No treatment</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>TREE_DENSITY</td><td>VC(2)</td><td>The relative tree density classification. The classification is based on the number of stems/unit area, basal area, tree cover, or stocking of all live trees in the condition that are not overtopped. In order to qualify as a separate condition based on density, there MUST be a distinct, easily observed change in the density of an area's tree cover or basal area.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Initial density class</td><td>FIA</td></tr>
<tr><td>2</td><td>Density class 2 - density different than 1</td><td>FIA</td></tr>
<tr><td>3</td><td>Density class 3 - density different than 1 and 2</td><td>FIA</td></tr>
</table></td></tr>
</table>

NRV_FIA_MAPPED_CONDITIONS (cont.)

Name	Size	Description
VOL_LOC_GRP	VC2(200)	Volume location group. This is a regional identifier to indicate what equations are used for volume, biomass, site index, etc. For the specific codes used in a particular Region or State, contact the FIA program responsible for that Region or State.
WIDTH_OF_CONDITION	N(4)	RMRS variable. The linear forest stringer. Code 1 can only be used for conditions associated with riparian areas within a forestland context. Code / Description / Use 0 / 120 or more feet wide / RMRS 1 / 30 to 120 feet wide / RMRS

NRV_FIA_SETTING_MEASUREMENTS

This table contains columns describing setting level (cluster, plot, subplot) measurements collected on an FIA grid plot above and beyond those attributes defined in Nrv_setting_measurements.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6,0)	The database server ID where the record was created.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data
ACCESSIBLE_FOREST_PCT_VEG	N(3)	Subplot accessible forest percent. The percent of the subplot area in an accessible forested condition as estimated by the vegetation specialist when VEG_VISIT.VEG_MANUAL = 2.0 and higher. This value is derived from P2 subplot and condition data when VEG_VISIT.VEG_MANUAL = 1.7.
AK_SECTION	VC(3)	One of eight inventory sections for the State of Alaska.

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>ANNUAL_INVENTORY_FLG</td><td>VC(1)</td><td>Indicates if the SURVEY record is part of an annual or periodic inventory.

<table><tr><th>Code</th><th>Description</th></tr><tr><td>Y</td><td>Plots were selected using the panel system</td></tr><tr><td>N</td><td>Plots were not selected using the panel system</td></tr></table></td></tr>
<tr><td>CENSUS_YEAR</td><td>N(4)</td><td>FIADB Survey Table variable. The year (e.g. 1980 or 1990) of the Bureau of the Census land area figures to which total State land area is reconciled.</td></tr>
<tr><td>CONDITION_CLASS_CHANGE</td><td>VC(1)</td><td>RMRS variable.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>0</td><td>There have been no condition class changes from the previous inventory.</td><td>RMRS</td></tr><tr><td>1</td><td>True change has taken place since the last inventory.</td><td>RMRS</td></tr><tr><td>2</td><td>There are no true condition changes. The previous crew mapped a condition(s) in obvious error.</td><td>RMRS</td></tr><tr><td>3</td><td>There are no true condition changes. Change is due to procedural or definition changes.</td><td>RMRS</td></tr></table></td></tr>
<tr><td>CONDITION_MAJORITY_CODE</td><td>VC(1)</td><td><table><tr><th>Code</th><th>Description</th></tr><tr><td>M</td><td>Majority Setting; setting variables set to the majority condition</td></tr><tr><td>N</td><td>Normal setting; setting variables set if single condition only</td></tr><tr><td>C</td><td>Plot center setting; setting variables set to setting center condition</td></tr></table></td></tr>
<tr><td>CONGRESSIONAL_DISTRICT</td><td>N(4)</td><td>Congressional District Code. The first two digits are the State FIPS code and the last two digits are the congressional district number. If a state has only one congressional district the congressional district number is 00.</td></tr>
<tr><td>CONSECUTIVE_POINT_NUMBER</td><td>VC(4)</td><td>RMRS variable. The CPN assigned to the field location. This item is indicated on the field location packet.</td></tr>
<tr><td>COORDINATE_SYSTEM</td><td>VC(1)</td><td>The type of coordinate system used to obtain readings.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>Geographic coordinate system</td><td>FIA</td></tr><tr><td>2</td><td>UTM coordinate system</td><td>FIA</td></tr></table></td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CURRENT_LOCATION_STATUS</td><td>VC(1)</td><td>RMRS variable

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>At least one accessible forestland condition class.</td><td>RMRS</td></tr><tr><td>2</td><td>Entire location is nonforest.</td><td>RMRS</td></tr><tr><td>3</td><td>Entire location is access denied.</td><td>RMRS</td></tr><tr><td>4</td><td>Entire location is too hazardous to visit.</td><td>RMRS</td></tr></table></td></tr>
<tr><td>DISTANCE_TO_ROAD</td><td>VC(2)</td><td>The straight-line distance from plot center (subplot 1) to the nearest improved road.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>100 feet or less</td><td>FIA</td></tr><tr><td>2</td><td>101 to 300 feet</td><td>FIA</td></tr><tr><td>3</td><td>301-500 feet</td><td>FIA</td></tr><tr><td>4</td><td>501 to 1000 feet</td><td>FIA</td></tr><tr><td>5</td><td>1001 feet to 1/2 mile</td><td>FIA</td></tr><tr><td>6</td><td>1/2 to 1 mile</td><td>FIA</td></tr><tr><td>7</td><td>1 to 3 miles</td><td>FIA</td></tr><tr><td>8</td><td>3 to 5 miles</td><td>FIA</td></tr><tr><td>9</td><td>Greater than 5 miles</td><td>FIA</td></tr></table></td></tr>
<tr><td>EMAP_HEX</td><td>VC(7)</td><td>Not available yet. FIA locator, see Station for more information.</td></tr>
<tr><td>EXPANSION_FACTOR_ACRE</td><td>N(13,4)</td><td>Current expansion factor. The number of acres the sample plot represents for making current estimates of area. The sum of EXPCURR over all plot-level records for a particular State is the total land and water area of the State.</td></tr>
<tr><td>EXPANSION_FACTOR_ACRE_ UNADJ</td><td>N(13,4)</td><td>Current area expansion factor. The number of acres represented by the sample plot that are used to make current estimates of area where the sample excludes outside-of-the-population plots, but includes denied-access and hazardous plots.</td></tr>
<tr><td>EXPANSION_FACTOR_GROWTH</td><td>N(13,4)</td><td>Growth expansion factor. The number of acres the sample plot represents for estimating growth.</td></tr>
<tr><td>EXPANSION_FACTOR_ MORTALITY</td><td>N(13,4)</td><td>Mortality expansion factor. The number of acres the sample plot represents for estimating mortality.</td></tr>
<tr><td>EXPANSION_FACTOR_PERIODIC_ CHG</td><td>N(13,4)</td><td>Periodic change expansion factor. The number of acres that the sample plot represents for estimating periodic area change.</td></tr>
<tr><td>EXPANSION_FACTOR_ REMOVALS</td><td>N(13,4)</td><td>Removals expansion factor. The number of acres the sample plot represents for estimating removals.</td></tr>
<tr><td>EXPANSION_FACTOR_VOLUME</td><td>N(13,4)</td><td>Volume expansion factor. The number of acres the sample plot represents for making current estimates of volume, biomass, and number of trees.</td></tr>
<tr><td>FIADB_PLT_CN</td><td>VC(34)</td><td>Control Number from FIADB. References FIADB.PLOT.CN.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>FUTURE_FOREST_POTENTIAL</td><td>VC(1)</td><td>RMRS variable, which indicates if the location required a pre-field examination at the time of the next inventory (10-20 years).
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>No, there is no chance that this plot will meet forest definition at the next cycle.</td><td>RMRS</td></tr>
<tr><td>1</td><td>Yes, there is some chance that this plot could become forested in the next cycle.</td><td>RMRS</td></tr>
<tr><td>2</td><td>There are no forest tree species on the site, but other woody species not currently defined as forest species occupy the site.</td><td>RMRS</td></tr>
</table></td></tr>
<tr><td>GPS_AZIMUTH</td><td>N(3)</td><td>Azimuth to plot center. The azimuth from the location where the coordinates were collected to actual plot center. Recorded when GPS_TYPE = 2, 3, or 4</td></tr>
<tr><td>GPS_DATUM</td><td>VC(12)</td><td>The type of datum that the GPS data were collected in.</td></tr>
<tr><td>GPS_DISTANCE</td><td>N(3)</td><td>Distance to plot center. The horizontal distance from the location where the coordinates were collected to actual plot center. Recorded when GPS_TYPE = 2, 3, or 4.</td></tr>
<tr><td>GPS_ELEVATION</td><td>N(5)</td><td>The elevation, above mean sea level, of the plot center, in feet, as recorded by the GPS unit. Recorded when GPS_TYPE = 1, 2, or 4</td></tr>
<tr><td>GPS_ERROR</td><td>N(3)</td><td>The error as shown on the GPS unit to the nearest foot.</td></tr>
<tr><td>GPS_FILENAME</td><td>VC(12)</td><td>The filename containing the GPS positions collected on the plot, e.g. R0171519.ssf.</td></tr>
<tr><td>GPS_LATITUDE</td><td>N(8,6)</td><td>Latitude of the plot center to the nearest hundredth second, as determined by GPS. Collected in the field as DDMMSSSS, and converted to decimal degrees. Recorded when GPS_COORD_SYS = 1.</td></tr>
<tr><td>GPS_LONGITUDE</td><td>N(9,6)</td><td>Longitude of the plot center to the nearest hundredth second, as determined by GPS. Collected in the field as DDMMSSSS, and converted to decimal degrees. Recorded when GPS_COORD_SYS = 1.</td></tr>
<tr><td>GPS_SERIAL_NUMBER</td><td>VC(6)</td><td>The last six digits of the serial number on the GPS unit used. Valid values: 000001 to 999999.</td></tr>
<tr><td>GPS_UNIT</td><td>VC(2)</td><td>The kind of GPS unit used to collect coordinates. If suitable coordinates cannot be obtained, record 0.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>GPS coordinates not collected.</td><td>FIA</td></tr>
<tr><td>1</td><td>Rockwell Precision Lightweight GPS Receiver (PLGR)</td><td>FIA</td></tr>
<tr><td>2</td><td>Other brand capable of field averaging.</td><td>FIA</td></tr>
<tr><td>3</td><td>Trimble GeoExplorer or Pathfinder Pro</td><td>FIA</td></tr>
<tr><td>4</td><td>Recreational GPS (Garmin, Magellan, etc.)</td><td>FIA</td></tr>
</table></td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
HEXAGON_NUMBER	N(7)	The unique code assigned to each Phase 2 hexagon.
HEX_INTENSITY	VC(2)	Sample intensity assigned to polygon
INVENTORY_YEAR	N(4)	Inventory year. The year that best represents when the inventory data were collected. Under the annual inventory system, a group of plots is selected each year for sampling. The selection is based on a panel system. INVYR is the year in which the majority of plots in that group were collected (plots in the group have the same panel and, if applicable, subpanel). Under periodic inventory, a reporting inventory year was selected, usually based on the year in which the majority of the plots were collected or the mid-point of the years over which the inventory spanned. For either annual or periodic inventory, INVYR is not necessarily the same as MEASYEAR. Exceptions: • INVYR = 9999. INVYR is set to 9999 to distinguish those Western Phase 3 plots that are "off subpanel". This is due to differences in measurement intervals between Phase 3 (measurement interval=5 years) and Phase 2 (measurement interval=10 years) plots. Only users interested in performing certain Phase 3 data analyses should access plots with this anomalous value in INVYR. • INVYR < 100. INVYR less than 100 indicates that population estimates were derived from a pre-NIMS regional processing system and the same plot either has been or may soon be re-processed in NIMS as part of a separate evaluation. The NIMS processed copy of the plot follows the standard INVYR format. This only applies to plots collected in the South (SURVEY.RSCD = 33) with the national design or a similar regional design (PLOT.DESIGNCD =1 or 220- 233) that were collected when the inventory year was 1998 through 2005. • INVYR=98 is equivalent to 1998 but processed through regional system • INVYR=99 is equivalent to 1999 but processed through regional system • INVYR=0 is equivalent to 2000 but processed through regional system • INVYR=1 is equivalent to 2001 but processed through regional system • INVYR=2 is equivalent to 2002 but processed through regional system • INVYR=3 is equivalent to 2003 but processed through regional system • INVYR=4 is equivalent to 2004 but processed through regional system • INVYR=5 is equivalent to 2005 but processed through regional system

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>KINDCD_VEG</td><td>VC(2)</td><td>Vegetation sample kind code. A code indicating the kind of vegetation plot that was measured.

<table><tr><th>Code</th><th>Description</th></tr><tr><td>1</td><td>Initial P3 VEG plot establishment</td></tr><tr><td>2</td><td>Remeasurement of previously established P3 VEG plot</td></tr><tr><td>3</td><td>Replacement P3 VEG plot</td></tr></table></td></tr>
<tr><td>LANDOWNER_DATA_REQUEST</td><td>VC(1)</td><td>Has the plot landowner requested data from the plot or publications of inventory data?

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>0</td><td>No data request.</td><td>FIA</td></tr><tr><td>1</td><td>Raw plot data and plot card.</td><td>FIA</td></tr><tr><td>2</td><td>Summarized plot data.</td><td>FIA</td></tr><tr><td>3</td><td>Publications developed using plot information.</td><td>FIA</td></tr><tr><td>4</td><td>Raw plot data, summarized plot data.</td><td>FIA</td></tr><tr><td>5</td><td>Raw plot data, publications.</td><td>FIA</td></tr><tr><td>6</td><td>Summarized plot data, publications.</td><td>FIA</td></tr><tr><td>7</td><td>All (raw plot data, summarized plot data, publications).</td><td>FIA</td></tr></table></td></tr>
<tr><td>MACROPLOT_CENTER_ CONDITION</td><td>VC(1)</td><td>Macro-plot center condition. Unique identifying number assigned to each condition on a plot. Stores the condition class number of the condition class at the micro-plot center for micro-plot records.</td></tr>
<tr><td>MANUAL_VEG</td><td>VC(8)</td><td>Vegetation manual (field guide). Field guide version used to collect the P3 Vegetation Diversity and Structure data. Typically, this will be the same as the P2 field guide version, after version 2.0.1.
NOTE: Version 1.7 of the field guide was used in 2001-2003.
Version 2.0, first used in 2004, introduced a new protocol with significant changes in the vegetation sample basis. Version 2.0.1 and later versions modify the 2.0 protocol to allow recording of a separate value for plant covers with less than one percent as less than one percent (trace). The primary differences between the 1.7
and 2.0 and later protocols are noted under VEG_SAMPLE_BASIS, TRACE_COVER_ALLOWED and “*_PRE2004” columns.</td></tr>
<tr><td>MEASUREMENT_DATE_VEG</td><td>DATE</td><td>Vegetation measurement date. Date on which the plot was measured for P3 Vegetation Diversity and Structure data.</td></tr>
<tr><td>MICROPLOT_CENTER_ CONDITION</td><td>VC(1)</td><td>Micro-plot center condition. Unique identifying number assigned to each condition on a plot. Stores the condition class number of the condition class at the micro-plot center for micro-plot records.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>MANUAL_DB</td><td>N(3,1)</td><td>Version of the National Field Guide used to describe the current state of the data as it resides in the database. The data in the database have been standardized to this version.</td></tr>
<tr><td>MANUAL_FIELD</td><td>N(3,1)</td><td>Version of the National Field Guide used to describe procedures for collecting data on the plot</td></tr>
<tr><td>MICROPLOT_LOCATION</td><td>VC(1)</td><td>RMRS variable. The location of the micro-plot.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>12 feet horizontal at 90 degrees east of subplot center</td><td>RMRS</td></tr></table></td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who last modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was last modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database server ID where the record was last modified.</td></tr>
<tr><td>MORTALITY_VOLUME_CODE</td><td>VC(2)</td><td>Type of annual mortality volume code. Indicates how mortality volume is estimated.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>Current annual</td><td>FIA</td></tr><tr><td>2</td><td>Periodic annual</td><td>FIA</td></tr></table></td></tr>
<tr><td>NFS_CONTROL_YEAR</td><td>N(4)</td><td>National Forest System Area Control Year. The Forest Service produces an annual report entitled "Land Areas of the National Forest System." Forest Inventory area estimates of lands administered by the Forest Service are reconciled to match these reported numbers. This variable represents the year of the report.</td></tr>
<tr><td>NONSAMPLED_REASON</td><td>VC(2)</td><td>For plots or subplots that cannot be sampled, and are wholly or partially within the FIA sampling population, record one of the following reasons (collected when NRV_FIA_SETTING_MEASUREMENTS.PLOT_STATUS = 3 or NRV_FIA_SETTING_MEASUREMENTS.SUBPLOT_STATUS = 3).

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>Outside U.S. boundary</td><td>FIA</td></tr><tr><td>2</td><td>Denied access area</td><td>FIA</td></tr><tr><td>3</td><td>Hazardous situation</td><td>FIA</td></tr><tr><td>4</td><td>Time limitation</td><td>FIA</td></tr><tr><td>5</td><td>Botched data file</td><td>FIA</td></tr><tr><td>6</td><td>Plot lost</td><td>FIA</td></tr><tr><td>7</td><td>Plot in wrong location</td><td>FIA</td></tr><tr><td>8</td><td>Skipped visit</td><td>FIA</td></tr><tr><td>9</td><td>Dropped intensification</td><td>FIA</td></tr><tr><td>10</td><td>Other</td><td>FIA</td></tr><tr><td>11</td><td>Ocean</td><td>FIA</td></tr></table></td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>NONSAMPLED_REASON_VEG</td><td>VC(2)</td><td>Vegetation subplot nonsampled reason code. A code indicating why a subplot cannot be sampled when VEG_SUBP_STATUS_CD = 3.
Codes 1-4 can be assigned to entire plots or portions of plots that are not sampled. Code 5 is assigned only when the entire plot is affected.
If VEG_SUBP_STATUS_CD = 1 or 2, this variable is not recorded.
This value is derived for data collected with VEG_VISIT.VEG_MANUAL = 1.7.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>Outside U.S. boundary</td><td>FIA</td></tr><tr><td>2</td><td>Denied access area</td><td>FIA</td></tr><tr><td>3</td><td>Hazardous situation</td><td>FIA</td></tr><tr><td>4</td><td>Time limitation</td><td>FIA</td></tr><tr><td>5</td><td>Lost data (office use only)</td><td>FIA</td></tr><tr><td>10</td><td>Other</td><td>FIA</td></tr></table></td></tr>
<tr><td>NUMBER_P2_PANELS</td><td>N(2)</td><td>Number of panels. All states were divided into 5 panels for the annual inventory system where 20 percent of the plots in a cycle are measured in a panel. Equal to 5 for annual inventories; null for periodic inventories.</td></tr>
<tr><td>NUMBER_P2_SUBPANELS</td><td>N(2)</td><td>Number of subpanels. A subpanel is used for spatial de-intensification of the sampling grid. Western states decompose each panel into two subpanels to accommodate a ten-year cycle. Null if subpaneling is not used.</td></tr>
<tr><td>NUMBER_OF_READINGS</td><td>N(3)</td><td>The number of readings averaged by the GPS unit to calculate the plot coordinates.</td></tr>
<tr><td>OLD_PLOT_NUMBER</td><td>VC(7)</td><td>PNW variable. The plot number (if any) used for this location at previous inventories.</td></tr>
<tr><td>P2_HEXAGON_NUMBER</td><td>N(8)</td><td>Phase 2 hexagon number.</td></tr>
<tr><td>P2PANEL</td><td>N(2)</td><td>Phase 2 panel number. FIA panel number. This is recorded for inventories begun after 1998. For most inventories begun before 1999, the value of P2PANEL is set to null. Plots on the base grid are measured on a multiple-year cycle with the intention of measuring 1/n (where n is the number of years in the cycle) of the plots (called a panel) every year. The plots in any panel are chosen so they are uniformly distributed within the monitoring area.</td></tr>
<tr><td>P2_SUBPANEL</td><td>N(2)</td><td>Subpanel assignment for plot for those regions using sub-paneling. Null if sub-paneling is not used.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>P3PANEL</td><td>N(2)</td><td>Phase 3 panel number. Forest Health Monitoring panel number. Before 1999, FHM and FIA were distinct programs and the plots were not necessarily co-located. FIA and FHM field plots are co-located for inventories begun after 1998. The FHM suite of data now collected on a subset of FIA plots are referred to as phase 3 data. Phase 3 data are collected on a 5-year cycle with one-fifth of the plots (called a panel) measured every year. The value for P3PANEL ranges from 0 to 5 for those plots where phase 3 data were collected. The value of P3PANEL for all other plots is null.</td></tr>
<tr><td>P3_HEXAGON_NUMBER</td><td>N(7)</td><td>The unique code assigned to each Phase 3 hexagon. This is different than P3 Plot Number that is a 4-digit number.</td></tr>
<tr><td>P3_MEASUREMENT_DATE</td><td>DATE</td><td>Since the P2 and the P3 field crews will not always be on the plot on the same day(s), the measurement_date column in Nrv_setting_measurements that will store the P2 measurement data may not be adequate to store the P3 measurement date.</td></tr>
<tr><td>P3_PLOT_NUMBER</td><td>N(3)</td><td>The P3 Plot Numbers that are used to identify individual plots within the same Phase 3 (former FHM) hexagon.</td></tr>
<tr><td>P3_SUBPLOT_STATUS</td><td>VC(1)</td><td>This variable comes from the P3 vegetation diversity protocol.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Subplot sampled.</td><td>FIA</td></tr>
<tr><td>2</td><td>Subplot sampled, but portions of the subplot could not be physically occupied.</td><td>FIA</td></tr>
<tr><td>3</td><td>Subplot not sampled because the sum of all forested condition classes make up 50% of subplot area.</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>PLOT_LEVEL_NOTES</td><td>VC(200)</td><td>Notes pertaining to the entire plot. If the notes apply only to a specific subplot or other specific aspect of the plot, then make that clear in the notes.</td></tr>
<tr><td>PLOT_STATUS</td><td>VC(2)</td><td>
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Sampled – at least one forest condition present on plot</td><td>FIA</td></tr>
<tr><td>2</td><td>Sampled – no forest condition present on plot</td><td>FIA</td></tr>
<tr><td>3</td><td>Non-sampled</td><td>FIA</td></tr>
<tr><td>4</td><td>Sampled - not ground sampled - at lest one forest condition present on plot</td><td>FIA</td></tr>
<tr><td>5</td><td>Sampled – not ground sampled – no forest condition present on plot</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>PRECIPITATION</td><td>N(5,2)</td><td>PNW variable. The average annual precipitation in inches on plot.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>PREVIOUS_COORDINATE_METHOD</td><td>VC(1)</td><td>PNW variable. How previous plots obtained coordinates.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>D</td><td>Digitized from USGS maps.</td><td>PNW</td></tr><tr><td>M</td><td>Digitized (mdsd) from pi photography (usually small scale).</td><td>PNW</td></tr><tr><td>P</td><td>Digitized (mdsd) from plot photography (usually large scale).</td><td>PNW</td></tr><tr><td>G</td><td>Collected at the plot location using a GPS unit.</td><td>PNW</td></tr></table></td></tr>
<tr><td>PREVIOUS_WAYPOINT_NUMBER</td><td>VC(6)</td><td>PNW variable. If the previous coordinates for this plot have been downloaded as a waypoint into the PLGR GPS unit, this item indicates the plot's 3-digit waypoint number in the PLGR. The waypoint name is in the same format.</td></tr>
<tr><td>PREV_SETMEAS_CN</td><td>VC(34)</td><td>Foreign Key to NRV_SETTING_MEASUREMENTS.CN identifying the previously measured plot.</td></tr>
<tr><td>PUBLIC_USE_RESTRICTIONS</td><td>VC(2)</td><td>Public use restriction code. Restrictions posted near or on the plot that limits use of the area containing the plot. New in 1999.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>0</td><td>None - no public use restrictions</td><td>FIA</td></tr><tr><td>1</td><td>Keep out / no trespassing</td><td>FIA</td></tr><tr><td>2</td><td>No hunting or fishing</td><td>FIA</td></tr><tr><td>3</td><td>No dumping</td><td>FIA</td></tr><tr><td>9</td><td>Other - specify in plot-level notes</td><td>FIA</td></tr></table></td></tr>
<tr><td>QA_STATUS</td><td>N(1)</td><td>The type of plot data collected

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>Standard production plot</td><td>FIA</td></tr><tr><td>2</td><td>Cold check</td><td>FIA</td></tr><tr><td>3</td><td>Reference plot (off grid)</td><td></td></tr><tr><td>4</td><td>Training/practice plot (off grid)</td><td>FIA</td></tr><tr><td>5</td><td>Botched plot file (disregard during data processing)</td><td>FIA</td></tr><tr><td>6</td><td>Blind check</td><td></td></tr><tr><td>7</td><td>Production plot (hot check)</td><td></td></tr></table></td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>QA_STATUS_VEG</td><td>VC(1)</td><td>Vegetation quality assurance status. A code indicating the type of vegetation measurement conducted. Production plots have VEG_QA_STATUS = 1 or 7. Often differs from P2 QA_status, but for analysis will always be linked to P2 QA_Status=1 plot data.

<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>1</td><td>Standard production plot</td></tr>
<tr><td>2</td><td>Cold check</td></tr>
<tr><td>3</td><td>Reference plot (off grid)</td></tr>
<tr><td>4</td><td>Training/practice plot (off grid)</td></tr>
<tr><td>5</td><td>Botched plot file (disregard during data processing)</td></tr>
<tr><td>6</td><td>Blind check</td></tr>
<tr><td>7</td><td>Production plot (hot check)</td></tr>
</table>
</td></tr>
<tr><td>QUADRAT_STATUS_VEG</td><td>VC(1)</td><td>Quadrat status. A code indicating how the quadrat was sampled.

<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>1</td><td>Quadrat sampled (most of the quadrat is in an accessible forest condition)</td></tr>
<tr><td>2</td><td>Quadrat not sampled because most or all of it does not fall in an accessible forested condition class</td></tr>
<tr><td>3</td><td>Quadrat sampled, no vascular plants rooted in or overhanging within 6 feet of the ground surface</td></tr>
<tr><td>4</td><td>Quadrat not sampled, hazard present on quadrat</td></tr>
<tr><td>5</td><td>Quadrat not sampled, other reason – enter in plot notes</td></tr>
<tr><td>6</td><td></td></tr>
<tr><td>7</td><td></td></tr>
</table>

consistent with VEG_VISIT.VEG_MANUAL = 2.0 and higher. If QUADRAT_STATUS is 1 or 3, the quadrat is sampled and data are collected even if no vascular plants are present. If the value entered is 2, 4, or 5, the quadrat was not sampled. This value is derived for VEG_VISIT.VEG_MANUAL = 1.7 plots.</td></tr>
<tr><td>RANGE_LAND_PILOT</td><td>VC(1)</td><td>RMRS variable. Indicates if the location falls in a rangeland pilot unit.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Location is not in a range land pilot unit (n)</td><td>RMRS</td></tr>
<tr><td>1</td><td>Location is in a range land pilot unit (y)</td><td>RMRS</td></tr>
</table>

The default value for Arizona and Utah is “0”.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>REC_USE_1</td><td>VC(2)</td><td>Recreation use code 1. Primary recreation use within the accessible forest land portion of any of the four subplots, based on evidence such as campfire rings, compacted areas (from tents), hiking trails, bullet or shotgun casings, tree stands, etc.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>No evidence of recreation use.</td><td>FIA</td></tr>
<tr><td>1</td><td>Motor vehicle (four wheel drive, ATV, motorcycle, snowmobile)</td><td>FIA</td></tr>
<tr><td>2</td><td>Horse riding, dog team trails, ski trails</td><td>FIA</td></tr>
<tr><td>3</td><td>Camping</td><td>FIA</td></tr>
<tr><td>4</td><td>Hiking</td><td>FIA</td></tr>
<tr><td>5</td><td>Hunting/shooting</td><td>FIA</td></tr>
<tr><td>6</td><td>Fishing</td><td>FIA</td></tr>
<tr><td>7</td><td>Boating - physical evidence such as launch sites or docks.</td><td>FIA</td></tr>
<tr><td>9</td><td>Other - recreation use where evidence is present, such as human litter, but purpose is not clear or does not fit into above categories.</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>REC_USE_2</td><td>VC(2)</td><td>Recreation use code 2. The second most significant recreational use. Same codes as rec_use_1</td></tr>
<tr><td>REC_USE_3</td><td>VC(2)</td><td>Recreation use code 3. The second most significant recreational use. Same codes as rec_use_1.</td></tr>
<tr><td>ROAD_USE_RESTRICTIONS</td><td>VC(2)</td><td>Road use restrictions code. The kind of access restrictions placed on roads used to travel to the plot starting point. New in 1999.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>None - no road access restrictions.</td><td>FIA</td></tr>
<tr><td>1</td><td>Locked gate or cable access road.</td><td>FIA</td></tr>
<tr><td>2</td><td>Road blocked by a human obstruction, not gate or cable (e.g. mound).</td><td>FIA</td></tr>
<tr><td>3</td><td>Road blocked by natural occurrences (trees blown over road, road or bridge washed out).</td><td>FIA</td></tr>
<tr><td>4</td><td>Posted no motorized vehicle.</td><td>FIA</td></tr>
<tr><td>9</td><td>Other - specify in plot-level notes.</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
SAMPLE_BASIS_VEG	VC(1)	Vegetation sample basis. A code indicating whether P3 Vegetation and Diversity Structure data were collected on both forested and nonforested portions of a subplot with at least 50% accessible forest, or on accessible forest conditions only. This code affects how data are compiled to determine (a) the total canopy cover by layer, or (b) cover of a species as a percent of the accessible forested portion of a subplot for those subplots with VEG_SUBPLOT.SUBP_ACCESSIBLE_FOREST_PCT < 100. The affects of VEG_SAMPLE_BASIS when adjusting ocular measures of canopy cover on partially forested subplots: When VEG_SAMPLE_BASIS = 1, and SUBP_ACCESSIBLE_FOREST_PCT is less than 100, we make the assumption that cover is spread evenly over the entire subplot in order to calculate the total canopy cover in accessible forest. To calculate the total canopy cover (in any layer) in accessible forest conditions, multiply total canopy cover recorded by the proportion of subplot in forested condition (SUBP_ACCESSIBLE_FOREST_PCT/100%). When VEG_SAMPLE_BASIS = 2, and SUBP_ACCESSIBLE_FOREST_PCT is less than 100, calculate total cover on the accessible forested conditions by dividing the recorded total canopy cover (in any layer) by the proportion of subplot in accessible forested condition (SUBP_ACCESSIBLE_FOREST_PCT/100%). Example: A subplot is 70% in accessible forested condition. The proportion of subplot area in forest condition is 0.70. Species A is present on the subplot with a total cover of 10%, with half its cover on the non-forested portion of the subplot. If this subplot was measured under VEG_SAMPLE_BASIS = 1, cover for species A would have been recorded as 10%. Under VEG_SAMPLE_BASIS = 2, species A would be recorded as 5%. To determine the percent cover of species A in the forested area of the plot: VEG_SAMPLE_BASIS = 1: Cover species A in forested area = 10% □ 0.7 □ 7% VEG_SAMPLE_BASIS = 2 Cover species A in forested area = 5% 1 Data collected across entire subplot □ 7% Cold areas □ Descriptio where % accessible forest conditions is greater than or equal to 50% (VEG_MANUAL = 1.7). May include non-forest, hazardous, or access denied conditions. 2 Data collected on accessible forest conditions only (VEG_MANUAL = 2.0 and higher)

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SIZE_FORESTED_AREA</td><td>VC(4)</td><td>RMRS variable. The size of the entire continuous forestland area (all forestland condition classes combined surrounding the LC. Includes any forest condition in any ownership. Use the aerial photographs of the field location to aid in determining the size of the forestland area.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>No forest land on the location</td><td>RMRS</td></tr>
<tr><td>1</td><td>1-5 acres</td><td>RMRS</td></tr>
<tr><td>2</td><td>6-10 acres</td><td>RMRS</td></tr>
<tr><td>3</td><td>11-20 acres</td><td>RMRS</td></tr>
<tr><td>4</td><td>21-40 acres</td><td>RMRS</td></tr>
<tr><td>5</td><td>41-160 acres</td><td>RMRS</td></tr>
<tr><td>6</td><td>161-640 acres</td><td>RMRS</td></tr>
<tr><td>7</td><td>1-5 square miles</td><td>RMRS</td></tr>
<tr><td>8</td><td>>5 sq. miles</td><td>RMRS</td></tr>
<tr><td>9</td><td>Forest Stringer</td><td>RMRS</td></tr>
</table></td></tr>
<tr><td>SNOW_WATER_DEPTH</td><td>N(2,1)</td><td>Water or snow depth. The approximate depth (in feet) of water or snow covering the subplot when data were collected. New in 1999.</td></tr>
<tr><td>SPECIAL_STUDY_CODE</td><td>VC(8)</td><td>PNW variable. Is the plot area is within the sample area for Special Study 2001a, which varies from 0 to roughly 50 miles from the coast, and if qualifying trees on this plot are sampled for Platform and Moss Abundance.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>Y</td><td>Qualifying trees are sampled for Platform and Moss Abundance</td><td>PNW</td></tr>
<tr><td>N</td><td>Trees are not sampled for Platform and Moss Abundance</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>STATION_ID</td><td>VC(2)</td><td>Research Station Code. Identification number of the Forest Service Research Station.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>22</td><td>Rocky Mountain Research Station</td><td>FIA</td></tr>
<tr><td>23</td><td>North Central Research Station</td><td>FIA</td></tr>
<tr><td>24</td><td>Northeastern Research Station</td><td>FIA</td></tr>
<tr><td>26</td><td>Pacific Northwest Research Station</td><td>FIA</td></tr>
<tr><td>27</td><td>Alaska – Pacific Northwest Research Station</td><td>FIA</td></tr>
<tr><td>33</td><td>Southern Research Station</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>STUDY_NAME</td><td>VC(128)</td><td>Name of FIA study or project.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SUBDIVISION_CODE</td><td>N(4)</td><td>Subdivision code. Needed for when there is a change to the cycle length within a state. In Region 5 the National Forest System plots were collected over a five year period while the rest of the plots were collected over a ten year period</td></tr>
<tr><td>SUBPLOT_CENTER_CONDITIO N</td><td>VC(1)</td><td>Unique identifying number assigned to each condition on a plot. Stores the condition class number of the condition class at the subplot center for subplot records.</td></tr>
<tr><td>SUBPLOT_CONDITION_LIST</td><td>VC(4)</td><td>This is a core optional variable listing of all condition classes located within the 24.0 ft radius around the subplot center. In regions measuring the Core Optional annular plot; this is a listing of all condition classes located within the 58.9 ft radius around the macro plot center. A maximum of four conditions is permitted at any individual subplot / macro plot. For example, if condition 1 is the only condition class on a subplot, record 1000.</td></tr>
<tr><td>SUBPLOT_STATUS</td><td>VC(1)</td><td>Does this subplot or annual plot currently have at least one accessible forested condition class? In Regions measuring the CORE OPTIONAL macro plot, indicates if this macro plot currently has at least one forested condition class.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Sampled – at least one forest condition present on plot</td><td>FIA</td></tr>
<tr><td>2</td><td>Sampled – no forest condition present on plot</td><td>FIA</td></tr>
<tr><td>3</td><td>Nonsampled</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>SUBPLOT_STATUS_VEG</td><td>VC(1)</td><td>Vegetation subplot status code. A code indicating the vegetation subplot status as recorded when VEG_VISIT.VEG_MANUAL = 2.0 and higher. This value is derived when VEG_VISIT.VEG_MANUAL = 1.7 from P2 condition data, plot notes, and availability of various field-recorded records (e.g., subplot species and subplot totals.)
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>1</td><td>Sampled – at least one accessible forest land condition present</td></tr>
<tr><td>2</td><td>Sampled – no accessible forest land condition present on subplot</td></tr>
<tr><td>3</td><td>Nonsampled</td></tr>
</table></td></tr>
<tr><td>TIME_ON_PLOT</td><td>N(3,1)</td><td>Record the number of person-hours it took to measure all items on the plot.</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>TRACE_COVER_ALLOWED</td><td>VC(1)</td><td>Trace cover allowed. A code indicating whether plant cover values of less than one percent were recorded as 1 or 0.01 percent (collected as “t” in the field). The ability to enter trace as 0.01% was added starting with VEG_MANUAL = 2.0.1.

<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>0</td><td>Trace cover value (0.01%, recorded as “t” in the field)
not allowed; trace cover entered as full one percent
(VEG_MANUAL = 2.0 and earlier)</td></tr>
<tr><td>1</td><td>Trace cover value (0.01%, recorded as “t” in the field)
allowed for species canopy cover records
(VEG_MANUAL = 2.0.1 and later)</td></tr>
</table>
</td></tr>
<tr><td>TRAILS_OR_ROADS</td><td>VC(2)</td><td>Trail or road code. The type of trail or road that is closest to the plot and within 1 mile of plot center. If two or more roads are the same distance away, the higher quality one is recorded. New in 1999.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>None within 1 mile.</td><td>FIA</td></tr>
<tr><td>1</td><td>Paved road or highway.</td><td>FIA</td></tr>
<tr><td>2</td><td>Improved gravel road.</td><td>FIA</td></tr>
<tr><td>3</td><td>Improved dirt road.</td><td>FIA</td></tr>
<tr><td>4</td><td>Unimproved dirt or four-wheel drive road.</td><td>FIA</td></tr>
<tr><td>5</td><td>Human access trail primarily for recreational use.</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>VOLUME_GROWTH_CODE</td><td>VC(2)</td><td>Code for type of annual volume growth. Indicates how volume growth is estimated. Current annual growth is an estimate of the change in volume that occurred in a 1-year period ending when the plot was measured. Periodic annual growth is an estimate of the average annual change in volume occurring between two measurements, usually the current cycle and previous cycle.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Current annual</td><td>FIA</td></tr>
<tr><td>2</td><td>Periodic annual</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>WATER_AZIMUTH</td><td>N(3)</td><td>The azimuth from the center of subplot 1 to a water source within 200 feet. The azimuth to the point where the distance was measured. Measurement Quality Objectives: +/- 10 degrees.</td></tr>
<tr><td>WATER_ON_PLOT</td><td>VC(2)</td><td>Water on plot code. Water body less than 1 acre in size or a stream less than 30 feet wide that has the greatest impact on the area within the forest land portion of the four subplots. The coding hierarchy is listed in order from large permanent water to temporary water. New in 1999.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>None – no water sources within the accessible forest land. CONDITION CLASS</td><td>FIA</td></tr>
<tr><td>1</td><td>Permanent streams or ponds too small to qualify as noncensus water.</td><td>FIA</td></tr>
<tr><td>2</td><td>Permanent water in the form of deep swamps, bogs, marshes without standing trees present or with standing trees and less than 1.0 acre in size, or with standing trees.</td><td>FIA</td></tr>
<tr><td>3</td><td>Ditch/canal - human made channels used as a means of moving water, e.g. for irrigation or drainage that are too small to qualify as noncensus water.</td><td>FIA</td></tr>
<tr><td>4</td><td>Temporary streams.</td><td>FIA</td></tr>
<tr><td>5</td><td>Flood zones - evidence of flooding when bodies of water exceed their natural banks.</td><td>FIA</td></tr>
<tr><td>9</td><td>Other temporary water - specify in plot notes.</td><td>FIA</td></tr>
</table>
</td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>WATER_PROXIMITY</td><td>N(4)</td><td>PNW variable. The horizontal distance in feet from the edge of the water source to the subplot center. If there is no water source within 215 feet horizontal distance of subplot center, record '000'. Valid values are 000 through 215.RMRS variable. The distance from the LC to the nearest permanent or reliable source of surface water for any use. Only examine water sources within 1 mile of the LC.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Adjacent (200 feet or less)</td><td>RMRS</td></tr>
<tr><td>1</td><td>201-300 feet</td><td>RMRS</td></tr>
<tr><td>2</td><td>301-500 feet</td><td>RMRS</td></tr>
<tr><td>4</td><td>701-900 feet</td><td>RMRS</td></tr>
<tr><td>5</td><td>901-1100 feet</td><td>RMRS</td></tr>
<tr><td>6</td><td>1101-1320 feet</td><td>RMRS</td></tr>
<tr><td>7</td><td>1/4 - 1/2 mile</td><td>RMRS</td></tr>
<tr><td>8</td><td>1/2 - 1 mile</td><td>RMRS</td></tr>
<tr><td>9</td><td>None (no water source within 1 mile)</td><td>RMRS</td></tr>
</table></td></tr>
<tr><td>WATER_SOURCE</td><td>VC(2)</td><td>A description of the water - streams of varying widths, impoundments of various sizes, etc.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>00</td><td>None - no permanent or intermittent water source within 200 feet.</td><td>FIA</td></tr>
<tr><td>01</td><td>Permanent water best characterized as deep swamps, bogs, or marshes.</td><td>FIA</td></tr>
<tr><td>02</td><td>Permanent water best characterized as streams or canals less than 30 feet in width.</td><td>FIA</td></tr>
<tr><td>03</td><td>Permanent water best characterized as streams or canals 30 to 200 feet in width.</td><td>FIA</td></tr>
<tr><td>04</td><td>Permanent water best characterized as streams or canals more than 200 feet in width.</td><td>FIA</td></tr>
<tr><td>05</td><td>Permanent water best characterized as lakes or ponds less than 4.5 acres in size.</td><td>FIA</td></tr>
<tr><td>06</td><td>Permanent water best characterized as lakes or ponds 4.5 acres or larger in size.</td><td>FIA</td></tr>
<tr><td>07</td><td>Permanent water not described in codes 01-06.</td><td>FIA</td></tr>
<tr><td>08</td><td>Intermittent water - seasonal and well-defined stream channel or water body that is dry for long periods, but generally flows or contains water throughout the wet season.</td><td>FIA</td></tr>
</table></td></tr>
</table>

NRV_FIA_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
WATER_TYPE	VC(2)	RMRS variable. The type of water source used in determining water proximity.

Code	Description	Use
0	None	RMRS
1	Perennial	RMRS
2	Intermittent	RMRS
3	Not used	RMRS
4	Ephemeral	RMRS
5	Catchment basin	RMRS
6	Irrigation	RMRS
7	Other	RMRS

NRV_FIA_TREE_MEASUREMENTS

This table describes tree measurements collected on an FIA grid plot above and beyond those attributes defined in Nrv_tree_measurements.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
TREMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_tree_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
CAVITY_PRESENCE	VC(1)	PNW variable. Tree wildlife use. A cavity must be able to be used by wildlife to be coded. Record for all live and standing dead tally trees ≥ 5.0 inches.

Code	Description	Use
0	No cavity or den present	PNW
1	Cavity or den present < 6.0 inch s	PNW
	Cavity or den present ≥6.0 inches	PNW

COUNT_METHOD	VC(1)	Tree count. Valid codes: E = Estimated M = Measured

NRV_FIA_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CROWN_CHECK</td><td>VC(1)</td><td>Estimates crown condition in relation to a typical tree for the site where it is found.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>rown com letely visible</td><td>FIA</td></tr>
<tr><td>1</td><td>Crown completely visible with one side completely missing</td><td>FIA</td></tr>
<tr><td>2</td><td>Obstructed view of crown</td><td>FIA</td></tr>
<tr><td>3</td><td>Obstructed view of crown with one side completely missing</td><td>FIA</td></tr>
<tr><td>4</td><td>Crowns outside measurement window for P3</td><td>FIA</td></tr>
<tr><td>5</td><td>Deciduous crowns outside measurement window for P2</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>CROWN_DENSITY</td><td>N(3)</td><td>Estimates crown condition in relation to a typical tree for the site where it is found.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>00</td><td>0%</td><td>FIA</td></tr>
<tr><td>05</td><td>1-5%</td><td>FIA</td></tr>
<tr><td>10</td><td>6-10%</td><td>FIA</td></tr>
<tr><td>15</td><td>11-15%</td><td>FIA</td></tr>
<tr><td>20</td><td>16-20%</td><td>FIA</td></tr>
<tr><td>95</td><td>91-95%</td><td>FIA</td></tr>
<tr><td>99</td><td>96-1005</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>CROWN_DIEBACK</td><td>N(3)</td><td>Estimates reflect the severity of recent stresses on a tree. Estimate crown dieback as a percentage of the live crown area, including the dieback area. Uses the same coding scheme as the crown_density column.</td></tr>
<tr><td>CROWN_LIGHT_EXPOSURE</td><td>VC(1)</td><td>
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Tree receives no full light.</td><td>FIA</td></tr>
<tr><td>1</td><td>Tree receives full light from the top or 1 side.</td><td>FIA</td></tr>
<tr><td>2</td><td>Tree receives full light from the top and 1 side.</td><td>FIA</td></tr>
<tr><td>3</td><td>Tree receives full light from the top and 2 sides.</td><td>FIA</td></tr>
<tr><td>4</td><td>Tree receives full light from the top and 3 sides.</td><td>FIA</td></tr>
<tr><td>5</td><td>Tree receives full light from the top and 4 sides.</td><td>FIA</td></tr>
</table></td></tr>
</table>

NRV_FIA_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>DIAMETER_CHECK</td><td>N(2)</td><td>Core Variable

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>0</td><td>Diameter accurately measured at standard measurement locations.</td><td>FIA</td></tr><tr><td>1</td><td>Diameter estimated at standard measurement location.</td><td>FIA</td></tr><tr><td>2</td><td>Diameter accurately measured at non-standard location.</td><td>FIA</td></tr><tr><td>3</td><td>Diameter estimated at non-standard location.</td><td>FIA</td></tr><tr><td>4</td><td>Diameter measured at nonstandard location on tree, but not same location as previous Measurement.</td><td>FIA</td></tr><tr><td>5</td><td>Diameter modeled in the office.</td><td>FIA</td></tr></table></td></tr>
<tr><td>DIAMETER_PREVIOUS</td><td>N(5,2)</td><td>The previous diameter (in inches) of the sample tree at the point of diameter measurement where TREE.CYCLE=PLOT.LASTCYCLEMEASURED and TREE.SUBCYCLE=PLOT.LASTSUBCYCLEMEASURED</td></tr>
<tr><td>FIA_TREE_STATUS</td><td>VC(1)</td><td>Tree status code. Identifies whether the sample tree is live, cut, or dead. Includes only dead and cut trees required to estimate aboveground biomass and net annual volume for growth, mortality, and removals.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>0</td><td>No status – tree is not presently in the sample (re-measurement plots only). Tree was incorrectly tallied at the previous survey or currently is not tallied due to definition or procedural change.</td><td></td></tr><tr><td>1</td><td>Live tree – any live tree (new, re-measured, or ingrowth)</td><td>FIA</td></tr><tr><td>2</td><td>Dead tree – any dead tree (new, re-measured, or ingrowth) regardless of cause of death, which does not qualify as a removal.</td><td>FIA</td></tr><tr><td>3</td><td>Removal – a tree that has been cut or killed by direct human activity related to harvesting, silviculture or land clearing (re-measurement plots only). The tree may, or may not, have been utilized. Only code trees killed by fires as removals, if it was a prescribed burn.</td><td>FIA</td></tr></table></td></tr>
<tr><td>FOLIAGE_TRANSPARENCY</td><td>VC(2)</td><td>Is the amount of skylight visible through the live, normally foliated portion of the crown?</td></tr>
</table>

NRV_FIA_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>FORM_CLASS</td><td>VC(1)</td><td>PNW variable. Record for all live hardwood trees tallied that are ≥5.0 inch DBH/DRC. Form class is used in calculating net tree volume. When collected: on all hardwoods (and conifers in R5 national forests).

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>First 8 feet above s ump is straight.</td><td>PNW</td></tr>
<tr><td>2</td><td>First 8 feet a ove stump is not straight; but must have at least one straight log elsewhere in the tree.</td><td>PNW</td></tr>
<tr><td>3</td><td>No logs anywhere in tree due to form.</td><td>PNW</td></tr>
</table>
</td></tr>
<tr><td>HARDWOOD_CLUMP</td><td>VC(1)</td><td>PNW variable. Is a hardwood part of a clump? The clump is assigned a clump number, and the number is recorded for each hardwood tallied that is part of the clump. If a hardwood is not part of a clump, "0" is recorded for the trees. Clumps with tallied trees are numbered in consecutive order on a sublplot starting with "1". When collected, all live hardwood trees ≥1.0 inches DBH/DRC, live hardwood seedlings. Values = 0 to 9.</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who last modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was last modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database server ID where the record was last modified.</td></tr>
<tr><td>MOSS_ABUNDANCE</td><td>N(2)</td><td>PNW variable. Estimate the percentage of the surface area on the horizontal surface or top of each limb covered by moss only; do not include other epiphytes such as lichens. Estimate the moss coverage on the horizontal surface of all visible limbs in the lower two thirds of the live tree crown, then average across ALL limbs within the lower two thirds of the crown. Values: 0 to 99.</td></tr>
<tr><td>OLD_TAG_ID</td><td>VC(9)</td><td>Old tag id</td></tr>
<tr><td>PAST_CONDITION_ID</td><td>VC(1)</td><td>RMRS variable. Verify for previously tallied trees. Correct if an obvious error exists and make a note in tree notes.</td></tr>
<tr><td>PAST_TREE_STATUS</td><td>VC(1)</td><td>RMRS variable. If the past tree status appears to be incorrect, record an estimated past tree status.</td></tr>
<tr><td>PLATFORM_ABUNDANCE</td><td>N(2)</td><td>PNW variable. The number of limbs that contain one or more platforms. When collected: All live conifer tally trees ≥ 20.0 inches DBH on plots where special study 2001a = Yes. A tree with 10 or greater limbs with one or more platforms shall be tallied as 10. Values = 0 to 10.</td></tr>
<tr><td>PREVIOUS_CONDITION</td><td>VC(1)</td><td>The condition within the plot on which the tree occurred at the previous inventory.</td></tr>
<tr><td>PREVIOUS_SUBCYCLE</td><td>N(2)</td><td>The subcycle of the tree's previous condition. (In some instances, a plot may have been measured more than once during an inventory cycle. Subcycle is then needed to uniquely identify the previous condition).</td></tr>
<tr><td>PREVIOUS_TAG_ID</td><td>N(9)</td><td>PNW variable. On all lands, if the plot was a R6CVS plot, R5 inventory plot, or PNW-FIA plot at the previous visit, record the number that is on the CVS tag, R5 number tag, or PNW-FIA number tag. Reuse PNW-FIA number tags when appropriate.</td></tr>
</table>

NRV_FIA_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>RECONCILIATOIN_CODE</td><td>VC(1)</td><td>New Tree Reconcile code:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Ingrowth – new tally tree not qualifying a through growth (include reversions).</td><td>FIA</td></tr>
<tr><td>2</td><td>Through growth – new tally tree 5 inches DBH/DRC and larger, within the microplot.</td><td>FIA</td></tr>
<tr><td>3</td><td>Missed live – a live tree missed at previous inventory and that is live, dead, or removed now.</td><td>FIA</td></tr>
<tr><td>4</td><td>Missed dead – a dead tree missed at previous inventory and that is dead or removed now.</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>REMNANT_TREE</td><td>VC(1)</td><td>PNW variable. A remnant tree is a tree left by previous management activity or catastrophic event that is significantly older than the surrounding vegetation. Remnant trees do not form a canopy layer and are usually isolated individuals or small clumps.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>No</td><td>PNW</td></tr>
<tr><td>1</td><td>Yes</td><td>PNW</td></tr>
</table>
</td></tr>
<tr><td>SALVABLE_CODE</td><td>N(2)</td><td>Salvable dead code. A standing or down dead tree considered merchantable by regional standards.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Dead, not salvable</td><td>FIA</td></tr>
<tr><td>1</td><td>Dead, salvable</td><td>FIA</td></tr>
</table>
</td></tr>
<tr><td>SITE_TREE_NUMBER</td><td>N(5)</td><td>PNW variable. The assigned number for each site tree record on a plot. For subsequent re-measurements, when data is downloaded from the database to the PDR for data verification, this number is one of the variables that are downloaded by the software.</td></tr>
<tr><td>SLOPE_DISTANCE</td><td>N(6,3)</td><td>PNW variable. FIA Core 1.5 requires Horizontal Distance that will be stored in the distance column. PNW requires this second measurement.</td></tr>
</table>

NRV_FIA_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SNAG_DISAPPEARANCE</td><td>VC(2)</td><td>PNW variable. The code to indicate the reason for disappearance of a tree previously tallied as dead.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>2</td><td>Fell over "naturally" (wind, decay, etc.) or no longer self-PNW supported; still present.</td><td>PNW</td></tr>
<tr><td>3</td><td>Fell over "naturally", removed from the site, or not discernable by crew.</td><td>PNW</td></tr>
<tr><td>4</td><td>Cut down or pushed over; still present.</td><td>PNW</td></tr>
<tr><td>5</td><td>Cut down or pushed over; removed from the site, or not discernible by crew.</td><td>PNW</td></tr>
<tr><td>6</td><td>DBH/DRC and/or height no longer meet minimum for tally (snag shrank to less than 5.0 in. DBH/DRC or less than 4.5 feet tall).</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>SPECIES_GROUP</td><td>VC(2)</td><td>FIA species group number used to produce many of the standard presentation tables. The assignment of individual species to these groups is shown in Appendix G of the FIADB Users Manual. This is the common list that all published standard presentation tables must match.</td></tr>
<tr><td>STUMP</td><td>VC(1)</td><td>PNW variable. Is a standing dead tree record a stump? When collected: all trees with tree status = 2.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Not a stump</td><td>PNW</td></tr>
<tr><td>1</td><td>Is a stump</td><td>PNW</td></tr>
<tr><td>2</td><td>Is a stump with another tree growing out of it</td><td>PNW</td></tr>
</table></td></tr>
<tr><td>STUMP_DIAMETER</td><td>N(6,3)</td><td>RMRS variable.</td></tr>
</table>

NRV_FIA_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>TREE_HISTORY</td><td>VC(2)</td><td>PNW variable collected for mortality assessment

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>No status – a tree not presently in the sample (re-measurment plots only).</td><td>FIA</td></tr>
<tr><td>1</td><td>Live tree – any live tree (new, re-measured, or ingrowth).</td><td>FIA</td></tr>
<tr><td>2</td><td>Dead tree – any dead tree (new, re-measured, or ingrowth).</td><td>FIA</td></tr>
<tr><td>3</td><td>Removal tree – a tree that has been cut or killed by direct human activity.</td><td>FIA</td></tr>
<tr><td>4</td><td>Missing tree – a tree that was tallied in previous inventory but is now missing.</td><td>FIA</td></tr>
<tr><td>5</td><td>Mortality tree – a tree that dies naturally or by a non-human cause.</td><td>PNW</td></tr>
<tr><td>8</td><td>Harvested for use by humans.</td><td>PNW</td></tr>
<tr><td>9</td><td>Tree not found.</td><td>PNW</td></tr>
</table>
</td></tr>
<tr><td>TREE_STOCKING</td><td>N(7,4)</td><td>Tree stocking. A relative term used to describe (in percent) the adequacy of a given stand density in meeting a specific management objective. Species or forest type stocking functions were used to assess the stocking contribution of individual trees. These functions, which were developed using stocking guides, relate the area occupied by an individual tree to the area occupied by a tree of the same size growing in a fully stocked stand of like trees. The stocking of individual trees is used in the calculation of growing_stock and live_stocking in Nrv_fia_mapped_condition.</td></tr>
<tr><td>UTILIZATION_CLASS</td><td>VC(1)</td><td>Utilization class code. Identifies trees that have been cut and removed from the site.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Not utilized - can still be found on the site</td><td>FIA</td></tr>
<tr><td>1</td><td>Utilized - some portion of the tree cannot be found on site, assumed to have been removed. Includes the following codes</td><td>FIA</td></tr>
<tr><td>2</td><td>Harvested for industrial supply</td><td>PNW</td></tr>
<tr><td>3</td><td>Harvested for firewood or local use</td><td>PNW</td></tr>
<tr><td>4</td><td>Harvested for incidental reasons</td><td>PNW</td></tr>
</table>
</td></tr>
<tr><td>VIGOR_CLASS</td><td>VC(2)</td><td>Codes 1, 2, and 3. Definitions are quite lengthy. See page 13 of Chapter 12 of the P3 Field Manual. It is only collected on saplings.</td></tr>
</table>

NRV_FIRE_INFO

This table describes fire information.

Name	Size	Description
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
FIRE_INFO_CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
CLOUDY	N(3)	Cloudiness, in percent, at the time and date recorded in the previous column.
FIRE_DATE	DATE	The date of the fire.
FIRE_ID	VC(15)	The ID number or name that relates the fire to plots in the plot table. This field links this fire scale data with the plot scale data.
FIRE_NAME	VC(25)	The name of the fire.
FIRE_TIME	N(4)	The time of day that the observations were recorded, in a military time
FIRE_TYPE	VC(1)	Type of fire: **Code** / **Description** / **Use** F – Flanking B – Backing H – Head C – Crown
FLAME_DEPTH	N(5,2)	Flame depth, in feet, at the time and date recorded in the previous columns.
FLAME_LENGTH	N(5,2)	Flame length, in feet, at the time and date recorded in the previous columns.
FUEL_MOISTURE_1	N(3)	Fuel moisture, in percent, of the 1 hour downed dead woody fuel class (less than .25 inches in diameter).
FUEL_MOISTURE_10	N(3)	Fuel moisture, in percent, of the 10 hour downed dead woody fuel class (.25-1.0 inches in diameter)
FUEL_MOISTURE_100	N(3)	Fuel moisture, in percent, of the 100 hour downed dead woody fuel class (1-3 inches in diameter).
FUEL_MOISTURE_1000_ROTTEN	N(3)	Fuel moisture, in percent, of the rotten 1000 hour downed dead woody fuel class (greater than 3.0 inches in diameter).
FUEL_MOISTURE_1000_SOUND	N(3)	Fuel moisture, in percent, of the sound 1000 hour downed dead woody fuel class (greater than 3.0 inches in diameter).

NRV_FIRE_INFO (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>FUEL_MOISTURE_CROWN</td><td>N(3)</td><td>Moisture, in percent, of the live tree crown foliage.</td></tr>
<tr><td>FUEL_MOISTURE_DUFF</td><td>N(3)</td><td>Moisture, in percent, of the duff layer. This layer contains the unrecognizable decomposing organic material.</td></tr>
<tr><td>FUEL_MOISTURE_HERB</td><td>N(3)</td><td>Moisture, in percent, of the live herbaceous plants.</td></tr>
<tr><td>FUEL_MOISTURE_LITTER</td><td>N(3)</td><td>Moisture, in percent, of the litter layer. This layer contains the recognizable needles, cone scales, and leaves.</td></tr>
<tr><td>FUEL_MOISTURE_SHRUB</td><td>N(3)</td><td>Moisture, in percent, of the live shrubs.</td></tr>
<tr><td>FUEL_MOISTURE_SOIL</td><td>N(3)</td><td>Moisture, in percent, of the uppermost soil layer. This layer contains the top 10 cm of mineral soil just below the duff layer.</td></tr>
<tr><td>HUMIDITY</td><td>N(5,2)</td><td>Relative humidity, in percent, at the time and date recorded in the previous columns.</td></tr>
<tr><td>ID_REFERENCE</td><td>VC(20)</td><td>Fire code taken from the database of fire management agencies</td></tr>
<tr><td>IMAGE_FLAG</td><td>VC(1)</td><td>Flag to indicate if a set of special images (photos, landsat, etc.) for this specific fire was taken. This does not refer to aerial photos taken on a general flight path.
Y = Yes, a set of images was taken.</td></tr>
<tr><td>PLUME_BEHAVIOR</td><td>VC(2)</td><td>The dynamics of the fire plume.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>WV</td><td>Plume well ventilated, rising, and dispersing high above the burn.</td><td></td></tr>
<tr><td>US</td><td>Plume unstable with erratic behavior.</td><td></td></tr>
<tr><td>PD</td><td>Plume is dropping and going downhill into the valleys.</td><td></td></tr>
</table>
</td></tr>
<tr><td>REMARKS</td><td>VC(4000)</td><td>Record information pertinent to the fire.</td></tr>
<tr><td>SEVERITY</td><td>N(1)</td><td>How severe the fire was.</td></tr>
<tr><td>SPOTTING</td><td>VC(2)</td><td>Spotting behavior of the fire at the time and date recorded in the previous columns.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>SD</td><td>Spotting downslope or downwind</td><td></td></tr>
<tr><td>SU</td><td>Spotting upslope or upwind</td><td></td></tr>
<tr><td>SE</td><td>Spotting is erratic and very random</td><td></td></tr>
<tr><td>NS</td><td>No spotting observed</td><td></td></tr>
<tr><td>NA</td><td>Difficult to determine spotting due to smoke or obstruction</td><td></td></tr>
</table>
</td></tr>
<tr><td>SPREAD_RATE</td><td>N(5,2)</td><td>The average speed of the fire, in feet per minute, at the time and date recorded in the previous columns.</td></tr>
<tr><td>TEMPERATURE</td><td>N(5,2)</td><td>Temperature, in degrees F, at the time and date recorded in the previous columns.</td></tr>
<tr><td>WINDSPEED</td><td>N(5,2)</td><td>Wind speed, in miles per hour, at the time and date recorded in the previous columns.</td></tr>
</table>

NRV_GROUP_BY

This table contains columns describing summary data. It contains attributes for portions (groups) of information about a site. For example, the number of plants per area might be identified for a particular species, or a particular size class of a species. This information is stored here, rather than in the characterizations table, since it refers to a subset of the data.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CHAR_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
GROUP_1 ***Required***	VC(24)	Nrv_con_grp_mtx.template_name
SUBGROUP_1 ***Required***	VC(30)	Nrv_subgroups.subgroup_name
SUMMARY_NO ***Required***	VC(10)	Nrv_controls.summary_no
ANN_INCR_PER	N(8,4)	**Computed.** Periodic annual increment. Volume of tree growth, in cubic foot volume per acre, over a period divided into the number of years in the period. SELECT SUM((radial_growth/10) * tpa_stand_eq * DCODE(radial_growth,NULL,NULL,1)), SUM(tpa_stand_eq * DECODE(radial_growth,NULL,NULL,1)) FROM NRV_Grp_By_Summary_Temp WHERE cn = stand_cn AND off_plot_flag IS NULL; avdgr := navdgr/davdgr;
ANN_INCR_PER_LEN	N(3)	Always set to "10". Number of years used in calculating ann_incr_per
BASAL_AREA	N(8,4)	**Computed.** Basal area per acre, in square feet SELECT SUM(ba_stand_eq) FROM NRV_Grp_By_Summary_Temp WHERE cn = p_stand_cn AND off_plot_flag IS NULL

BASAL_AREA_CV	N(13,4)	**Computed.** Coefficient of variation of basal_area column
		
		IF v_basal_area > 0 THEN
		v_basal_area_cv := (v_basal_area_sd *100) / v_basal_area;

NRV_GROUP_BY (cont.)

Name	Size	Description

BASAL_AREA_SD	N(13,4)	**Computed.** Standard deviation of basal_area column
		
		CURSOR C_PLOT IS SELECT DISTINCT plot
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn;
		OPEN C_PLOT;
		LOOP
		FETCH C_PLOT INTO point;
		EXIT WHEN C_PLOT%NOTFOUND;
		SELECT SUM(ba_plot_eq) INTO tsum
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = stand_cn
		AND plot = point
		AND off_plot_flag IS NULL;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		CLOSE C_PLOT;
		sdba := ROUND(SQRT((psum - ((ssum * ssum) / pnum)) / (pnum - 1)),3);

BASAL_AREA_SE	N(7,4)	**Computed.** Standard error of basal_area column
		
		SELECT COUNT(DISTINCT plot) into v_pnum
		FROM NRV_stid_summary_base_temp
		WHERE cn = p_stand_cn;
		IF sqrt(v_pnum) <> 0 THEN
		v_std_error := p_sdtpa / sqrt(v_pnum);
		END IF;

CONE_SEROTINY	VC(1)	Nrv_perm_grp_by.cone_serotiny
COVER_AGE	N(4)	Average or predominant age of the cover layer. Stored in years.
COVER_TYPE	VC(10)	Characterization of the existing vegetation composition for each polygon.
COVER_DIAMETER	N(6,3)	Predominant cross-sectional width of a plant measured through the center of the stem. Stored in inches.
COVER_HEIGHT	N(7,4)	Average or predominant height of the cover layer. Stored in feet.
COVER_HEIGHT_MAX	N(7,4)	Maximum height of a cover layer. Stored in feet.
COVER_HEIGHT_MIN	N(7,4)	Minimum height of a cover layer. Stored in feet.
COVER_LAYER	VC(3)	Foreign key to Nrv_cover_layers.
COVER_LAYER_CODE_LOCAL	VC(2)	Locally defined code for the cover layer.
COVER_LIFEFORM	VC(2)	Nrv_lifeform_modifier.lifeform_modifier

NRV_GROUP_BY (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>COVER_SHRUB_AGE_CLASS</td><td>VC(2)</td><td>Estimate of the age class of a shrub or tree. Shrub age class is based on the percentage of branch or foliage maturity. Tree age class is based on overall appearance, crown, branch, and bark characteristics.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>SS</td><td>Seedling/sprout</td><td>CSE</td></tr>
<tr><td></td><td>Immature, no dead material (stems and branches) associated with the shrub record.</td><td>FIA</td></tr>
<tr><td>YO</td><td>Young</td><td>CSE</td></tr>
<tr><td></td><td>Mature, 1-24 percent dead material associated with the shrub record.</td><td>FIA</td></tr>
<tr><td>MA</td><td>Mature</td><td>CSE</td></tr>
<tr><td></td><td>Over-mature, 25-49 percent dead material associated with shrub record.</td><td>FIA</td></tr>
<tr><td>DE</td><td>Decadent</td><td>CSE</td></tr>
<tr><td></td><td>Decadent, 50 percent or more dead material associated with shrub record.</td><td></td></tr>
<tr><td>X</td><td>Dead</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>COVER_SURFACE_CODE</td><td>VC(4)</td><td>Nrv_surface_cover_types.surface_cover_code</td></tr>
<tr><td>CROWN_DIAMETER</td><td>N(4,1)</td><td>Nrv_perm_grp_by.crown_diameter</td></tr>
<tr><td>CROWN_RATIO_COMP</td><td>N(3)</td><td>Compacted live crown ratio, in percent.</td></tr>
<tr><td>CROWN_RATIO_UNC</td><td>N(3)</td><td>Nrv_perm_grp_by.crown_ratio_unc</td></tr>
<tr><td>DATA_METHOD</td><td>VC(30)</td><td>Nrv_cn_temp.data_method</td></tr>
<tr><td>DATA_SOURCE</td><td>VC(30)</td><td>Nrv_cn_temp.source_type</td></tr>
<tr><td>DECAY_CLASS</td><td>VC(1)</td><td>Nrv_perm_grp_by.decay_class</td></tr>
</table>

NRV_GROUP_BY (cont.)

Name	Size	Description

DIAMETER	N(7,4)	**Computed.** The diameter value used to characterize the GROUP BY class, in inches. Either the quadratic mean diameter or average diameter as indicated by the DIAMETER_TYPE column, DIAMETER is computed as follows:
		▪ Quadratic Mean Diameter = The class quadratic mean diameter, where only on-plot, non-NULL diameter > 0 trees are included (Note: This is the preferred method of characterizing class diameters for the summary process):
		$QMD_{CLASS} = \sqrt{\frac{\sum_{i=1}^{n} D_i TPA_i}{\sum_{i=1}^{n} TPA_i}}$
		▪ Average Diameter = The class average diameter, where only on-plot, non-NULL diameter > 0 trees are included (Note: Not commonly used in the summary process):
		$\hat{D}_{CLASS} = \frac{\sum_{i=1}^{n} D_i TPA_i}{\sum_{i=1}^{n} TPA_i}$
		CURSOR C_qmd1 IS
		SELECT SUM(tpa_stand_eq),
		SUM(dbh*dbh*tpa_stand_eq)
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = p_stand_cn
		AND dbh IS NOT NULL
		AND off_plot_flag IS NULL
		AND dbh >0;
		CURSOR C_qmd2 IS
		SELECT SUM(tpa_stand_eq),
		SUM(drc*drc*tpa_stand_eq)
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = p_stand_cn
		AND drc IS NOT NULL
		AND off_plot_flag IS NULL
		AND drc >0;
		FETCH C_qmd1 INTO dhtsum, dh2tsum;
		FETCH C_qmd2 INTO drtsum, dr2tsum;
		IF dhtsum IS NULL THEN dhtsum := 0;
		IF dh2tsum IS NULL THEN dh2tsum := 0;
		IF drtsum IS NULL THEN drtsum := 0;
		IF dr2tsum IS NULL THEN dr2tsum := 0;
		IF dhtsum+drtsum = 0 THEN
		qmd := NULL;
		ELSE
		qmd := QRT((dh2tsum+dr2tsum)/(dhtsum+drtsum));
		RETURN(qmd);

NRV_GROUP_BY (cont.)

Name	Size	Description
DIAMETER_TYPE	VC(4)	Set to "QMD"
DISTRIBUTION_TYPE	VC(1)	Nrv_perm_grp_by.distribution_type
DOMINANT_SPECIES	VC(8)	Nrv_perm_grp_by.dominant_species
FUEL_WEIGHT	N(7,4)	Nrv_perm_grp_by.fuel_weight
GEOGRAPHICAL_AREA	VC(5)	Nrv_setting_measurements.geographical_area
GIS_LINK	VC(26)	Nrv_setting_measurements.gis_link

HEIGHT_GROWTH	N(4,1)	**Computed.** The mean annual height growth, in feet.
		
		SELECT SUM(height_growth * tpa_stand_eq * DECODE(height_growth,NULL,NULL,1)), SUM(tpa_stand_eq * DECODE(height_growth,NULL,NULL,1))
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = stand_cn
		AND off_plot_flag IS NULL;
		OPEN C_avhgr1;
		FETCH C_avhgr1 INTO navhgr, davhgr;
		CLOSE C_avhgr1;
		IF davhgr <> 0 THEN
		avhgr := navhgr/davhgr;
		END IF;
		RETURN(avhgr);

HEIGHT_LENGTH_AVG	N(4,1)	**Computed.** The average height or length, in feet. SELECT min(height), max(height) INTO v_height_length_min, v_height_length_max FROM NRV_Grp_By_Summary_Temp;
HEIGHT_LENGTH_MAX	N(4,1)	**Computed.** The tallest height or longest length, in feet. SELECT min(height), max(height) INTO v_height_length_min, v_height_length_max FROM NRV_Grp_By_Summary_Temp
HEIGHT_LENGTH_MIN	N(4,1)	**Computed.** The shortest height or length, in feet. SELECT min(height), max(height) INTO v_height_length_min, v_height_length_max FROM NRV_Grp_By_Summary_Temp
LANDFORM	VC(2)	Nrv_perm_grp_by.landform
LAYER_HT_MAX	N(3)	Nrv_perm_grp_by.layer_ht_max
LAYER_HT_MIN	N(3)	Nrv_perm_grp_by.layer_ht_min
LOCAL_AT6_DESCRIPTION	VC(80)	Nrv_perm_char.local_at6_description.
LOCAL_AT7_DESCRIPTION	VC(80)	Nrv_perm_char.local_at7_description.
LOCAL_AT8_DESCRIPTION	VC(80)	Nrv_perm_char.local_at8_description.
LOCAL_AT9_DESCRIPTION	VC(80)	Nrv_perm_char.local_at9_description.
LOCAL_AT10_DESCRIPTION	VC(80)	Nrv_perm_char.local_at10_description.
LOCALLY_DEFINED_AT6	VC(30)	Nrv_perm_grp_by.locally_defined_at6
LOCALLY_DEFINED_AT7	VC(30)	Nrv_perm_grp_by.locally_defined_at7
LOCALLY_DEFINED_AT8	VC(30)	Nrv_perm_grp_by.locally_defined_at8
LOCALLY_DEFINED_AT9	VC(30)	Nrv_perm_grp_by.locally_defined_at9

LOCALLY_DEFINED_AT10	VC(30)	Nrv_perm_grp_by.locally_defined_at10

NRV_GROUP_BY (cont.)

Name	Size	Description
MERCH_BOARD_GROSS	N(13,4)	**Computed.** Merchantable, gross board foot volume per acre. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4. SELECT SUM(tpa_stand_eq * merch_board_volume) FROM NRV_Grp_By_Summary_Temp WHERE user_ops_acct = user AND cn = p_stand_cn AND off_plot_flag IS NULL;
MERCH_BOARD_NET	N(13,4)	Nrv_perm_grp_by.merch_board_net
MERCH_CUBIC_GROSS	N(11,4)	**Computed.** Merchantable, gross cubic foot volume per acre. For Region 9, this is the cubic foot volume in the sawlog portion of sawtimber trees. It does not include the topwood volume. It does not include pulpwood tree volume. SELECT SUM(tpa_stand_eq * merch_cubic_volume) FROM NRV_Grp_By_summary_temp WHERE cn = p_stand_cn AND off_plot_flag IS NULL;
MERCH_CUBIC_NET	N(11,4)	Nrv_perm_grp_by.merch_cubic_net
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
NO_OF_PIECES	N(5)	Nrv_perm_grp_by.no_of_pieces
NOXIOUS_WEED	VC(1)	Nrv_perm_grp_by.noxious_weed
PLANTS	N(9,4)	**Computed.** Number of plants per acre. SELECT SUM(tpa_stand_eq) FROM NRV_Grp_By_Summary_TEMP WHERE cn = p_stand_cn AND off_plot_flag IS NULL;
PLANTS_CV	N(13,4)	**Computed.** Coefficient of variation of the plants column =(v_plants_sd *100)/ v_plants;

NRV_GROUP_BY (cont.)

Name	Size	Description

PLANTS_SD	N(13,4)	**Computed.** Standard deviation of the pPlants column.
		
		SELECT DISTINCT plot
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = stand_cn;
		SELECT COUNT(DISTINCT plot) INTO pnum
		FROM NRV_stid_summary_base_temp
		WHERE cn = stand_cn;
		OPEN C_PLOT;
		LOOP
		FETCH C_PLOT INTO point;
		SELECT SUM(tpa_plot_eq) INTO tsum
		FROM NRV_Grp_By_Summary_Temp
		WHERE cn = stand_cn
		AND plot = point
		AND off_plot_flag IS NULL;
		IF tsum IS NULL THEN tsum := 0; END IF;
		ssum := ssum + tsum;
		psum := psum + (tsum*tsum);
		END LOOP;
		sdtpa :=SQRT((psum-((ssum * ssum)/pnum))/(pnum-1));
		RETURN(sdtpa);

PLANTS_SE	N(7,4)	**Computed.** Standard error of the plants column.
		
		SELECT COUNT(DISTINCT plot) into v_pnum
		FROM NRV_stid_summary_base_temp
		WHERE cn = p_stand_cn;
		IF sqrt(v_pnum) <> 0 THEN
		v_std_error := p_sdtpa / sqrt(v_pnum);
		END IF;

PLANT_COVER	N(4,1)	Nrv_perm_grp_by.plant_cover
POLYGON_COVERAGE_ID	VC(30)	Nrv_cover_id_control.polygon_coverage_id
RADIAL_GROWTH	N(3)	**Computed.** Periodic change, in 20ths of an inch, in the bole radius over a time period. SELECT SUM((radial_growth/10)* tpa_stand_eq * DECODE(radial_growth,NULL,NULL,1)), SUM(tpa_stand_eq * DECODE(radial_growth,NULL,NULL,1)) FROM NRV_Grp_By_Summary_Temp WHERE cn = stand_cn AND off_plot_flag IS NULL; avdgr := navdgr/davdgr; RETURN(avdgr);
RADIAL_GROWTH_PERIOD	N(3)	Set to NULL
SELECTION_CRITERIA_NO	VC(3)	Nrv_selection_criteria.selection criteria_no
SHRUB_SHAPE	VC(1)	Nrv_perm_grp_by.shrub_shape
SHRUB_SIZE	VC(1)	Nrv_perm_grp_by.shrub_size
SHRUB_VIGOR	VC(1)	Nrv_perm_grp_by.shrub_vigor
SNAGS	N(9,4)	Nrv_perm_grp_by.snags

NRV_GROUP_BY (cont.)

Name	Size	Description
SPECIES_SYMBOL	VC(8)	Nrv_perm_grp_by.species_symbol
TE_SPECIES	VC(1)	Nrv_perm_grp_by.te_species
TOTAL_CUBIC	N(11,4)	**Computed**. Total cubic foot volume per acre. Representing the total ground-to-tip cubic foot volume of the main stem (does not include branches or foliage) of trees, this is a gross volume that is not associated with merchandising rules and therefore does not have a net volume counterpart.
TREE_SIZE_CLASS	VC(2)	Nrv_perm_grp_by.tree_size_class
USER_OPS_ACCT	VC(30)	Nrv_con_grp_mtx.user_ops_acct
VEG_CLASS	VC(2)	Nrv_perm_grp_by.veg_class
VIGOR	VC(1)	Nrv_perm_grp_by.vigor
WEIGHT	N(7,4)	Nrv_perm_grp_by.weight
YEAR_OF_ORIGIN	N(4)	**Computed.** The year when the majority of plants within a class were established. SELECT SUM(age * tpa_stand_eq * DECODE(age,NULL,NULL,1)), SUM(tpa_stand_eq * DECODE(age,NULL,NULL,1)) FROM NRV_Grp_By_Summary_Temp WHERE cn = stand_cn AND off_plot_flag IS NULL; OPEN C_avage; FETCH C_avage INTO navage, davage; CLOSE C_avage; avage := navage/davage; RETURN(avage);

NRV_IMAGES

This table describes images stored in the database.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DIRECTORY_PATH ***Required***	VC(120)	Directory path name where the file of an image is stored electronically.
FILENAME ***Required***	VC(70)	File name of an image (directory path is stored in a separate field).
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that

		Region's and Forest's data.

NRV_IMAGES (cont.)

Name	Size	Description
DATE_TAKEN	DATE	The date the photograph was taken.
DESCRIPTION	VC(70)	Description of the image.
IMAGE	BLOB	Stores actual image, can be a .jpg, .pdf or .doc format
LABEL	VC(70)	Label displayed next to the image.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
PHOTOGRAPHER	VC(50)	Name of photographer.

NRV_PERM_CHAR

This table describes legacy summary data and closely resembles Nrv_characterizations.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
DATA_METHOD ***Required***	VC(30)	<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>PI</td><td>Photo interpretation</td><td>All</td></tr><tr><td>SI</td><td>Satellite imagery</td><td>All</td></tr><tr><td>SE</td><td>Stand exam</td><td>All</td></tr></table>
SETTING_ID ***Required***	VC(30)	Uniquely identifies the setting where the data are collected. This field may contain the following information: For stand exams - Region, Forest, District, Location, and Stand Number. For FIA data - State//Cycle//Subcycle//Survey_unit//County//Plot (State(2)//Cycle(2)//Subcycle(2)//Survey Unit(2)/County(3)//Plot(5)
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.

NRV_PERM_CHAR (cont.)

Name	Size	Description
AGENCY	VC(4)	Governing agency or the agency that owns the land the setting is located on.
AGGREGATION_TYPE	VC(1)	A map unit attribute to describe the arrangement of vegetation condition found within a map feature or polygon. An aggregation type consists of a homogenous dominance type or plant association, or compositional group, or vegetation complex arrangements of dominance types or plant associations. Valid codes are: H = homogenous type G = compositional group type C = vegetation complex type
ANN_INCR_MEAN	N(8,4)	Mean annual increment. Volume of tree growth, in cubic foot volume per acre, over a period divided into the stand age.
ANN_INCR_PER	N(8,4)	Periodic annual increment. Volume of tree growth, in cubic foot volume per acre, over a period of time, divided into the number of years in the period.
ANN_INCR_PER_LN	N(3)	The number of years used to calculate ann_incr_per
ASPECT	N(3)	General direction of downslope, in degrees azimuth, that the site faces. 0 = flat 360 = north 999 = indeterminate, undulating, or no predominant slope
BASAL_AREA	N(8,4)	Basal area per acre, in square feet, of live tees.
BASAL_AREA_CV	N(13,4)	Coefficient of variation of basal_area column
BASAL_AREA_SD	N(13,4)	Standard deviation of basal_area column
BASAL_AREA_SE	N(7,4)	Standard error of basal_area column
BOUNDARY_SOURCE	VC(30)	Media by which the polygon boundaries were generated, such as GPS, photographs, or satellite imagery.
CANOPY_BULK_DENSITY	N(3)	The bulk density of the canopy (kg/m3) as described in Scott and Reinhardt (2001).
CANOPY_CLOSURE	N(3)	Amount, in percent, of the site covered by the crowns of vegetation.
CANOPY_CLOSURE_CROWNVEG	N(3)	Amount, in percent, of the polygon covered by the foliage of crown vegetation.
CANOPY_CLOSURE_GRASSES	N(3)	Amount, in percent, of the polygon covered by the foliage of grasses.
CANOPY_CLOSURE_HERBS	N(3)	Amount, in percent, of the polygon covered by the foliage of herbs.
CANOPY_CLOSURE_NON_TREE	N(3)	Amount, in percent, of the polygon covered by vegetation cover other than the tree canopy.
CANOPY_CLOSURE_SHRUBS	N(3)	Amount, in percent, of the polygon covered by the foliage of shrubs.
CANOPY_CLOSURE_TREES	N(3)	Amount, in percent, of the polygon covered by the tree canopy.
CANOPY_COVER	N(4,1)	Amount, in percent, of the site covered by plant canopy.
CAPABLE_GROW_AREA_PCT	N(3)	Area, in percent, capable of growing trees.

NRV_PERM_CHAR (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>COMPARTMENT_NO</td><td>VC(10)</td><td>Division of forest for purposes of orientation, administration, and silvicultural operations. It is defined by permanent boundaries, of natural features or artificially marked.</td></tr>
<tr><td>CONDITION_CLASS</td><td>N(1)</td><td>A classification of the amount of departure from the historical natural fire regime. For each fire regime, there are three condition classes based on departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.

<table><tr><th>Class</th><th>Description</th></tr><tr><td>1</td><td>Within the natural (historical) range of variability.</td></tr><tr><td>2</td><td>Moderate departure from the natural (historical) regime.</td></tr><tr><td>3</td><td>High departure from the natural (historical) regime.</td></tr></table></td></tr>
<tr><td>COUNTY</td><td>VC(3)</td><td>Numeric County code where the site is located.</td></tr>
<tr><td>COVER_BARE_SOIL</td><td>N(3)</td><td>Percent of the site covered by bare mineral soil.</td></tr>
<tr><td>COVER_BARREN</td><td>N(3)</td><td>Percent of the site that is barren.</td></tr>
<tr><td>COVER_BASAL_VEG</td><td>N(3)</td><td>Percent of the site covered by basal vegetation.</td></tr>
<tr><td>COVER_BOULDER</td><td>N(3)</td><td>Percent of the site covered by boulders.</td></tr>
<tr><td>COVER_COBBLE</td><td>N(3)</td><td>Percent of the site covered by cobbles (7.5-25 cm in diameter).</td></tr>
<tr><td>COVER_DOMINANT</td><td>VC(2)</td><td>Dominant surface cover type.</td></tr>
<tr><td>COVER_GRAVEL</td><td>N(3)</td><td>Percent of the site covered by gravel (.2-7.5 cm in diameter).</td></tr>
<tr><td>COVER_LITTER</td><td>N(3)</td><td>Percent of the site covered by dead plant material. Includes leaves, needles, twigs, bark, fruits, duff, and downed wood actually in contact with the ground surface.</td></tr>
<tr><td>COVER_NON_VEG</td><td>N(3)</td><td>Amount of the polygon that is not covered by vegetation; in general, the component of the polygon that is covered by water, bare soil, rock, or snow fields. Value can range from 0 to 100 percent.</td></tr>
<tr><td>COVER_ROCK</td><td>N(3)</td><td>Percent of the site covered by rock (everything larger than .08 inches or 2 mm in diameter).</td></tr>
<tr><td>COVER_STONE</td><td>N(3)</td><td>Percent of the site covered by stones (25-60 cm in diameter).</td></tr>
<tr><td>COVER_WATER</td><td>N(3)</td><td>Percent of the site covered by water.</td></tr>
<tr><td>CROWN_CONDITION_REF</td><td>VC(30)</td><td>Not used at this time</td></tr>
<tr><td>CROWNING_INDEX</td><td>N(3)</td><td>20-foot wind speed (mph) needed to support an active or running crown fire.</td></tr>
<tr><td>CROWN_BASE_HEIGHT</td><td>N(3)</td><td>Nrv_tree_measurements.</td></tr>
<tr><td>CROWN_CONDITION</td><td>VC(1)</td><td>An indication of the vigor of trees, determined by the current condition of the treetops.</td></tr>
</table>

NRV_PERM_CHAR (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CROWN_FIRE</td><td>VC(2)</td><td>Coding based on the forested polygon's potential to express crown fire behavior during a wildfire event.

<table><tr><th>Code</th><th>Description</th></tr><tr><td>L</td><td>Low</td></tr><tr><td>M</td><td>Moderate</td></tr><tr><td>H</td><td>High</td></tr><tr><td>NA</td><td>Not Applicable – non-forest and woodland polygons</td></tr></table></td></tr>
<tr><td>CUBIC_CULL</td><td>N(11,4)</td><td>Cubic foot volume per acre in live, sound, and rotten cull trees 5.0 inches in diameter and larger.</td></tr>
<tr><td>DATE_ACCURACY</td><td>VC(5)</td><td>Accuracy of the date stored in measurement_date

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>DAY</td><td>Valid to the nearest day</td><td>All</td></tr><tr><td>MONTH</td><td>Valid to the nearest month</td><td>All</td></tr><tr><td>YEAR</td><td>Valid to the nearest year</td><td>All</td></tr><tr><td>EST</td><td>Only an estimate</td><td>All</td></tr></table></td></tr>
<tr><td>DBH</td><td>N(5,2)</td><td>Quadratic mean diameter, in inches, or the diameter, in inches, of the tree of average basal area.</td></tr>
<tr><td>DBH_BREAKPOINT</td><td>N(5,2)</td><td>Minimum diameter, in inches, allowed by the sampling design.</td></tr>
<tr><td>DBH_TYPE</td><td>VC(4)</td><td>The value the user chose for calculating diameter in the summary application.</td></tr>
<tr><td>DENSITY_INDEX</td><td>N(7,2)</td><td>Calculated stand density index.</td></tr>
<tr><td>DENSITY_INDEX_REF</td><td>VC(30)</td><td>The published reference for density_index</td></tr>
<tr><td>DENSITY_INDEX_TYPE</td><td>VC(30)</td><td>Set to "QMD."</td></tr>
<tr><td>DISTRICT_NO</td><td>VC(2)</td><td>Ranger district number of the administrator or owner of the site.</td></tr>
<tr><td>DOWN_WOODY</td><td>N(10,4)</td><td>Weight, in tons per acre, of the down woody material.</td></tr>
<tr><td>DUFF_LITTER_DEPTH</td><td>N(6,3)</td><td>The depth, in inches, of duff and litter.</td></tr>
<tr><td>ECOREGION_SUBSECTION</td><td>VC(7)</td><td>Bailey's Ecoregion subsection.</td></tr>
<tr><td>ELEVATION</td><td>N(6,1)</td><td>Height, in feet, above sea level.</td></tr>
<tr><td>ELEVATION_MAX</td><td>N(6,1)</td><td>The maximum site elevation, in feet.</td></tr>
<tr><td>ELEVATION_MIN</td><td>N(6,1)</td><td>The minimum site elevation, in feet.</td></tr>
<tr><td>EV_CODE</td><td>VC(10)</td><td>Existing site vegetation code.</td></tr>
<tr><td>EV_REF_CODE</td><td>VC(10)</td><td>Document from which the ev_code was obtained. This column is constrained by the codes in Nrv_cover_references.</td></tr>
</table>

NRV_PERM_CHAR (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>FIRE_REGIME</td><td>N(1)</td><td>A general classification of the role fire would play across a landscape in the absence of modern human mechanical intervention. There are five natural (historical) fire regimes. Classification is based on average number of years between fires combined with severity of the fire on the dominant overstory vegetation.

<table><tr><th>Code</th><th>Description</th></tr><tr><td>1</td><td>0-35 year frequency and low (surface fires most common) to mixed severity (<75% of the dominant overstory vegetation replaced).</td></tr><tr><td>2</td><td>0-35 year frequency and high (stand replacement) severity (>75% of the dominant overstory vegetation replaced).</td></tr><tr><td>3</td><td>35-100+ year frequency and mixed severity (<75% of the dominant overstory vegetation replaced).</td></tr><tr><td>4</td><td>35-100+ year frequency and high (stand replacement) severity (>75% of the dominant overstory vegetation replaced).</td></tr><tr><td>5</td><td>200+ year frequency and high (stand replacement) severity.</td></tr></table></td></tr>
<tr><td>FORAGE</td><td>N(4)</td><td>The forage, in pounds per acre, produced on the site.</td></tr>
<tr><td>FOREST_ADMIN</td><td>VC(2)</td><td>Administrative Forest number.</td></tr>
<tr><td>FOREST_PROC</td><td>VC(2)</td><td>Proclaimed Forest number.</td></tr>
<tr><td>FUEL_DEPTH</td><td>N(3,1)</td><td>The average depth, in inches, the fuel bed extends above the surface of the site.</td></tr>
<tr><td>FUEL_MODEL</td><td>VC(3)</td><td>Fuel model used.</td></tr>
<tr><td>FUEL_PHOTO_REFERENCE</td><td>VC(10)</td><td>Document from which the fuel model was obtained or the residue description photo.</td></tr>
<tr><td>GIS_LINK</td><td>VC(26)</td><td>The identifier to link the site to a Geographic Information System (GIS) coverage.</td></tr>
<tr><td>HABITAT_EFFECT_INDEX</td><td>VC(1)</td><td></td></tr>
<tr><td>HAB_STRUCT_STAGE_CODE</td><td>VC(50)</td><td>Nrv_vss.vss, trimmed to 2 characters (only used for Regions 2, 3, & 4)</td></tr>
<tr><td>HAB_STRUCT_STAGE_REF</td><td>VC(30)</td><td>Region code in the format ‘R02,’ ‘R03,’ or ‘R04’ (only used for Regions 2, 3, & 4)</td></tr>
<tr><td>HAZ_RATING</td><td>VC(1)</td><td>Hazard ratings for stands.</td></tr>
<tr><td>HORIZONTAL_CONTINUITY</td><td>VC(1)</td><td>A description of the uniformity of the site.</td></tr>
<tr><td>INVENTORY_STRATIFICATION</td><td>VC(10)</td><td>The average site stratum.</td></tr>
<tr><td>LANDFORM</td><td>VC(2)</td><td>The average site landform (e.g., convex, concave).</td></tr>
<tr><td>LATITUDE_DEG</td><td>N(3)</td><td>Degree portion of the angular distance, North or South of the equator. Stored in degrees.</td></tr>
<tr><td>LATITUDE_MIN</td><td>N(2)</td><td>Minute portion of the angular distance, North or South of the equator. Stored in minutes.</td></tr>
<tr><td>LATITUDE_SEC</td><td>N(4,2)</td><td>Second portion of the angular distance, North or South of the equator. Stored in seconds.</td></tr>
</table>

NRV_PERM_CHAR (cont.)

Name	Size	Description
LOADER_VERSION	VC(15)	The version of the loader program used to load the data into the perm summary tables. This field contains the loader compilation date and is populated only at the parent record of the setting, not the child record.
LOCAL_AT1_DESCRIPTION	VC(80)	Description of local attribute number 1.
LOCAL_AT2_DESCRIPTION	VC(80)	Description of local attribute number 2.
LOCAL_AT3_DESCRIPTION	VC(80)	Description of local attribute number 3.
LOCAL_AT4_DESCRIPTION	VC(80)	Description of local attribute number 4.
LOCAL_AT5_DESCRIPTION	VC(80)	Description of local attribute number 5.
LOCALLY_DEFINED_AT1	VC(30)	Locally defined attribute number 1.
LOCALLY_DEFINED_AT2	VC(30)	Locally defined attribute number 2.
LOCALLY_DEFINED_AT3	VC(30)	Locally defined attribute number 3.
LOCALLY_DEFINED_AT4	VC(30)	Locally defined attribute number 4.
LOCALLY_DEFINED_AT5	VC(30)	Locally defined attribute number 5.
LOCALLY_DEFINED_AT6	VC(30)	Locally defined attribute number 6.
LOCALLY_DEFINED_AT7	VC(30)	Locally defined attribute number 7.
LOCALLY_DEFINED_AT8	VC(30)	Locally defined attribute number 8.
LOCALLY_DEFINED_AT9	VC(30)	Locally defined attribute number 9.
LOCALLY_DEFINED_AT10	VC(30)	Locally defined attribute number 10.
LOCATION	VC(16)	The location of the stand within a Region, Forest, and District.
LONGITUDE_DEG	N(3)	Degree portion of the angular distance East or West of the prime meridian at Greenwich, England. Stored in degrees.
LONGITUDE_MIN	N(2)	Minute portion of the angular distance East or West of the prime meridian at Greenwich England. Stored in minutes.
LONGITUDE_SEC	N(4,2)	Second portion of the angular distance East or West of the prime meridian at Greenwich England. Stored in seconds.
LYNX_HABITAT	VC(1)	Lynx habitat code.
MANAGEMENT_PRODUCTIVITY	VC(1)	An indicator of the mean annual increment of stand growth
MANAGEMENT_TYPE_EV_CODE	VC(50)	Not used at this time
MANAGEMENT_TYPE_EV_REF	VC(30)	Not used at this time
MANAGEMENT_TYPE_SITE_INDEX	N(4,1)	Not used at this time
MANAGEMENT_TYPE_SI_REFCODE	VC(3)	Not used at this time
MANAGEMENT_TYPE_SI_SPECIES	VC(8)	Not used at this time
MEASUREMENT_DATE	DATE	Date the site was measured.
MERCH_BOARD_GROSS	N(13,4)	Merchantable, gross board foot volume per acre. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4.
MERCH_BOARD_GROSS_SD	N(15,4)	Standard deviation of merch_board_gross
MERCH_BOARD_GROSS_SE	N(7,4)	Standard error of merch_board_gross
MERCH_BOARD_NET	N(13,4)	Merchantable, net board foot volume per acre.
MERCH_BOARD_NET_SD	N(15,4)	Standard deviation of merch_board_net
MERCH_BOARD_NET_SE	N(7,4)	Standard error of merch_board_net

NRV_PERM_CHAR (cont.)

Name	Size	Description
MERCH_CUBIC_GROSS	N(11,4)	Merchantable, gross cubic foot volume per acre. For Region 9, this is the cubic foot volume in the sawlog portion of sawtimber trees. It does not include the topwood volume. It does not include pulpwood tree volume.
MERCH_CUBIC_GROSS_SD	N(13,4)	Standard deviation of merch_cubic_gross.
MERCH_CUBIC_GROSS_SE	N(7,4)	Standard error of merch_cubic_gross
MERCH_CUBIC_NET	N(11,4)	Merchantable, net cubic foot volume per acre.
MERCH_CUBIC_NET_SD	N(13,4)	Standard deviation of merch_cubic_net
MERCH_CUBIC_NET_SE	N(7,4)	Standard error of merch_cubic_net
MERIDIAN_CODE	VC(2)	The principal meridian, defined as the line from which the survey of township boundaries along the parallels is initiated. This column is constrained by the codes in Nrv_principal_meridians.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
NFS_LAND_CLASS	VC(3)	Current land class used for NFS data. A classification that indicates the basic land cover.
PAG	VC(7)	Plant Association Group. An aggregation of plant association groups with similar dominant plant species.
PHOTO_ID	VC(20)	A unique ID for each photo, defined within a photo project.
PRODUCTIVITY_CLASS	VC(2)	Range productivity class.
PROJECT_NAME	VC(25)	Summary project name.
PURPOSE_CODE	VC(4)	Code that represents the reason for the survey.
PV_CODE	VC(10)	Potential vegetation for this site.
PV_REF_CODE	VC(10)	Document from which the pv_code was obtained. This column is constrained by the codes in Nvr_cover_references.
RANGE_CAPABILITY	VC(1)	Range suitability is an indicator as to the ability of a given stand to support grazing by domestic (or at time, wild) ungulates. Codes are: Code / Description P – Primary Range S – Secondary Range T – Transitory Range U – Unsuitable Range R – Non-Range
RANGE_CONDITION	VC(1)	A rating for the site based on the amount of livestock forage present as compared with the largest quantity of forage that could exist on that site under current environmental conditions.
RANGE_TREND	VC(1)	A resource value rating for range livestock forage condition.

NRV_PERM_CHAR (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>REFERENCE_DATE</td><td>DATE</td><td>Date of survey or measurement, which includes both field survey and photo interpretation.</td></tr>
<tr><td>REFERENCE_DATE_ACCURACY</td><td>VC(5)</td><td>Accuracy of the date stored in reference_date.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>DAY</td><td>Valid to the nearest day.</td><td>All</td></tr><tr><td>MONTH</td><td>Valid to the nearest month.</td><td>All</td></tr><tr><td>YEAR</td><td>Valid to the nearest year.</td><td>All</td></tr><tr><td>EST</td><td>Only an estimate.</td><td>All</td></tr></table></td></tr>
<tr><td>REGEN_EV_CODE</td><td>VC(10)</td><td>Not used at this time</td></tr>
<tr><td>REGEN_EV_CODE_REF</td><td>VC(10)</td><td>Not used at this time</td></tr>
<tr><td>REGION_ADMIN</td><td>VC(2)</td><td>Administrative Region number.</td></tr>
<tr><td>REGION_PROC</td><td>VC(2)</td><td>Proclaimed Region number.</td></tr>
<tr><td>REMARKS</td><td>VC(255)</td><td>Remarks about this summary.</td></tr>
<tr><td>RESIDUE_DESC_CODE</td><td>VC(10)</td><td>Document from which the fuel model was obtained or the residue description photo.</td></tr>
<tr><td>RIPARIAN_POLYGON</td><td>VC(1)</td><td>Not used at this time</td></tr>
<tr><td>SAF_COVER_TYPE</td><td>VC(3)</td><td>Society of American Foresters forest cover type code. These codes are numeric and up to 3 digits. Example: 27 = sugar maple.</td></tr>
<tr><td>SECTION</td><td>VC(2)</td><td>Public Land Survey section where the site is located. Valid numbers are 1-36.</td></tr>
<tr><td>SETTING_ORIGIN</td><td>VC(2)</td><td>Not used at this time</td></tr>
<tr><td>SETTING_SIZE</td><td>N(8,4)</td><td>Total area of the site, in acres.</td></tr>
<tr><td>SITE_INDEX</td><td>N(4,1)</td><td>A measure of vegetative productivity, determined from the height of a tree at a specified index of base age.</td></tr>
<tr><td>SITE_INDEX_REF</td><td>VC(10)</td><td>The reference for the data stored in site_index</td></tr>
<tr><td>SITE_INDEX_SPP</td><td>VC(8)</td><td>The NRCS plant code of the tree from which data in ste_index was calculated.</td></tr>
<tr><td>SLOPE</td><td>N(3)</td><td>Ratio, in percent, of vertical rise to horizontal distance for the site.</td></tr>
<tr><td>SLOPE_POSITION</td><td>VC(2)</td><td>Primary position of a setting on a slope.</td></tr>
<tr><td>SRM_COVER_TYPE</td><td>VC(3)</td><td>Society of Range Management rangeland cover type code. These codes are numeric and up to 3 digits. Example: 216 = montane meadows.</td></tr>
<tr><td>STAND_CONDITION</td><td>VC(2)</td><td>Classification based on the dominant canopy layer, and the overall condition of the site.</td></tr>
<tr><td>STAND_CONDITION_REF</td><td>VC(30)</td><td>Region code in the format ‘R08’ or ‘R09’ (only used for Regions 8 & 9)</td></tr>
<tr><td>STAND_VSS</td><td>VC(6)</td><td>Stand vegetation structural stage</td></tr>
<tr><td>STATE</td><td>VC(2)</td><td>State code where the site is located.</td></tr>
<tr><td>STATE_PLANE_DATUM</td><td>VC(10)</td><td>Method of determination for latitude and longitude.</td></tr>
<tr><td>STATE_PLANE_X</td><td>N(12,3)</td><td>The X-coordinate of the State Plane grid.</td></tr>
<tr><td>STATE_PLANE_Y</td><td>N(12,3)</td><td>The Y-coordinate of the State Plane grid.</td></tr>
<tr><td>STATE_PLANE_ZONE</td><td>VC(10)</td><td>The zone in which the State Plane exists.</td></tr>
</table>

NRV_PERM_CHAR (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>STOCKING_FLAG</td><td>VC(1)</td><td>Flag to indicate if the setting is currently stocked.
Y = Yes the setting is currently stocked</td></tr>
<tr><td>STOCKING_PERCENT</td><td>N(3)</td><td>The extent to which a given stand density meets a management objective, stored in percent. Valid values are 0-999</td></tr>
<tr><td>SUBCOMPARTMENT_NO</td><td>VC(10)</td><td>Subdivision of compartment.</td></tr>
<tr><td>SUITABILITY</td><td>VC(1)</td><td>Lands suitable for timber production are those which are forested, capable of producing industrial wood, restockable, not likely to sustain irreversible damage, have adequate response information, and have not been withdrawn from timber production. Codes are:

<table><tr><th>Code</th><th>Description</th></tr><tr><td>N</td><td>Non-forested land</td></tr><tr><td>W</td><td>Withdrawn from timber production</td></tr><tr><td>I</td><td>Land incapable of producing industrial wood</td></tr><tr><td>T</td><td>Irreversible damage likely to occur</td></tr><tr><td>R</td><td>Restocking cannot be assured</td></tr><tr><td>O</td><td>Adequate response information is lacking</td></tr><tr><td>S</td><td>Tentatively suitable for timber production</td></tr></table></td></tr>
<tr><td>SURVEY_UNIT</td><td>VC(2)</td><td>Forest Inventory and Analysis survey unit identification number. Survey units are usually groups of Counties within each State.</td></tr>
<tr><td>TIMBER_SUIT_RECOMMEND_CODE</td><td>VC(50)</td><td>Not used at this time</td></tr>
<tr><td>TIMBER_SUITABILITY_CODE</td><td>VC(50)</td><td>Not used at this time</td></tr>
<tr><td>TIMBER_SUITABILITY_REF</td><td>VC(30)</td><td>Not used at this time</td></tr>
<tr><td>TOTAL_CUBIC</td><td>N(11,4)</td><td>Nrv_setting_measurements.total_cubic</td></tr>
<tr><td>TORCHING_INDEX</td><td>N(3)</td><td>20-foot wind speed (mph) at which a surface fire is expected to ignite the crown layer.</td></tr>
<tr><td>TOWNSHIP</td><td>VC(5)</td><td>Public Land Survey township where the site is located.</td></tr>
<tr><td>TPA</td><td>N(10,4)</td><td>Number of live trees per acre in the site.</td></tr>
<tr><td>TPA_CV</td><td>N(13,4)</td><td>Coefficient of variation of TPA column</td></tr>
<tr><td>TPA_SD</td><td>N(13,4)</td><td>Standard deviation of TPA column</td></tr>
<tr><td>TPA_SE</td><td>N(7,4)</td><td>Standard error of TPA column</td></tr>
<tr><td>TREE_LAYER_STRUCTURE</td><td>VC(2)</td><td>Number of tree layers in the site.</td></tr>
</table>

NRV_PERM_CHAR (cont.)

Name	Size	Description
TREE_SIZE_CLASS	VC(2)	**Not currently filled**, but the intent is to list the tree size class that has the plurality of basal area in the setting, where the tree classes are: 1. 'SAWT' = sawtimber stands (BA/ac of 9+" diameter trees >= BA/ac of 5-8.9" trees or plurality of BA/ac is in trees >= 9" diameter). 2. 'POLE' = poletimber stands (plurality of BA/ac is in trees 5-8.9" diameter) 3. 'SEED'= seedling/sapling stands (plurality of BA/ac is in trees < 5"). 4. 'NONS' = nonstocked (Less than 10% stocked with trees). There is some discussion of developing size classes for shrubs, and, perhaps, herbaceous vegetation, but a national consensus is pending.
USGS_LANDUSE2	VC(2)	United States Geological Survey land use land cover code. A 2-digit numeric code such as "11" for residential, "41" for deciduous forestland or "72" for beaches.
UTM_DATUM	VC(10)	Method of determination for recording UTM coordinates. FIA plots use the NAD83 datum.
UTM_EASTING	N(6)	Easting, for the southwest corner of the UTM grid cell encompassing the setting. Stored in meters.
UTM_NORTHING	N(7)	Northing, for the southwest corner of the UTM grid cell encompassing the setting. Stored in meters.
UTM_ZONE	N(2)	UTM zone.
YEAR_OF_ORIGIN	N(4)	Calendar year the site was planted or created. This value is determined from the mean age of the dominant and codominant trees in the site.

NRV_PERM_GRP_BY

This table contains legacy summary data. This table is similar to Nrv_group_by.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.

NRV_PERM_GRP_BY (cont.)

Name	Size	Description
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
GROUP_1 ***Required***	VC(20)	The name of grouping class number 1.
PERM_CHAR_CN ***Required***	VC(34)	A foreign key to Nrv_perm_char.
SUBGROUP_1 ***Required***	VC(30)	The name of subgroup number 1.
USER_OPS_ACCT ***Required***	VC(30)	The OPS$ account number of the user who created the summary.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
ANN_INCR_PER	N(8,4)	Periodic annual increment. Volume of tree growth, in cubic foot volume per acre, over a period divided into the number of years in the period.
ANN_INCR_PER_LEN	N(3)	Number of years used in calculating ann_incr_per.
BASAL_AREA	N(8,4)	Basal area per acre, in square feet.
BASAL_AREA_CV	N(13,4)	Coefficient of variation of basal_area
BASAL_AREA_SD	N(13,4)	Standard deviation of basal_area
BASAL_AREA_SE	N(7,4)	Standard error of basal_area
CONE_SEROTINY	VC(1)	Percent of cones that are serotinous.
CROWN_DIAMETER	N(4,1)	Crown diameter, in feet.
CROWN_RATIO_COMP	N(3)	Compacted live crown ratio, in percent.
CROWN_RATIO_UNC	N(3)	Uncompacted live crown ratio, in percent.
DATA_METHOD	VC(30)	<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>SE</td><td>Stand exam</td><td>All</td></tr><tr><td>PI</td><td>Photo interpretation</td><td>All</td></tr></table>
DECAY_CLASS	VC(1)	Current condition of the down woody material.
DIAMETER	N(7,4)	The average or quadratic mean diameter, in inches.
DIAMETER_TYPE	VC(4)	The type of computed diameter value used to characterize the group by class: QMD = quadratic mean diameter AVG = average diameter
DISTRIBUTION_TYPE	VC(1)	The type of distribution of a grouping across a site.
DOMINANT_SPECIES	VC(8)	The species with the most cover or basal area.
FUEL_WEIGHT	N(7,4)	Fuel loading, in tons per acre.
GEOGRAPHICAL_AREA	VC(5)	Geographical area code for locations not on a Forest Service site.
GIS_LINK	VC(26)	The identifier to link the site to a Geographic Information System (GIS) coverage.
HEIGHT_GROWTH	N(4,1)	The mean annual height growth, in feet.
HEIGHT_LENGTH_AVG	N(4,1)	The average height or length, in feet.
HEIGHT_LENGTH_MAX	N(4,1)	The tallest height or longest length, in feet.
HEIGHT_LENGTH_MIN	N(4,1)	The shortest height or length, in feet.
LANDFORM	VC(2)	The average site landform (e.g., convex, concave).

NRV_PERM_GRP_BY (cont.)

Name	Size	Description
LAYER_HT_MAX	N(3)	Vertical distance, in feet, from ground level to the top of the layer.
LAYER_HT_MIN	N(3)	Vertical distance, in feet, from ground level to the bottom of the layer.
LOCAL_AT6_DESCRIPTION	VC(80)	Description of local attribute number 6.
LOCAL_AT7_DESCRIPTION	VC(80)	Description of local attribute number 7.
LOCAL_AT8_DESCRIPTION	VC(80)	Description of local attribute number 8.
LOCAL_AT9_DESCRIPTION	VC(80)	Description of local attribute number 9.
LOCAL_AT10_DESCRIPTION	VC(80)	Description of local attribute number 10.
LOCALLY_DEFINED_AT6	VC(30)	Locally defined attribute number 6.
LOCALLY_DEFINED_AT7	VC(30)	Locally defined attribute number 7.
LOCALLY_DEFINED_AT8	VC(30)	Locally defined attribute number 8.
LOCALLY_DEFINED_AT9	VC(30)	Locally defined attribute number 9.
LOCALLY_DEFINED_AT10	VC(30)	Locally defined attribute number 10.
MERCH_BOARD_GROSS	N(13,4)	Merchantable, gross board foot volume per acre.
MERCH_BOARD_NET	N(13,4)	Merchantable, net board foot volume per acre.
MERCH_CUBIC_GROSS	N(11,4)	Merchantable, gross cubic foot volume per acre. For Region 9, this is the cubic foot volume in the sawlog portion of sawtimber trees. It does not include the topwood volume. It does not include pulpwood tree volume.
MERCH_CUBIC_NET	N(11,4)	Merchantable, net cubic foot volume per acre.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
NO_OF_PIECES	N(5)	Number of similar down woody pieces per acre.
NOXIOUS_WEED	VC(1)	Flag indicating this plant is considered a noxious weed in the political unit.
PLANTS	N(9,4)	Number of plants per acre.
PLANTS_CV	N(13,4)	Coefficient of variation of the Plants column.
PLANTS_SD	N(13,4)	Standard deviation of the Plants column.
PLANTS_SE	N(7,4)	Standard error of the Plants column.
PLANT_COVER	N(4,1)	Total cover, in percent, of all plants. This is the percent of the unit covered by the vertical projection of live plants. Overlapping foliage is counted once.
RADIAL_GROWTH	N(3)	Periodic change, in 20ths of an inch, in the bole radius over a time period.
RADIAL_GROWTH_PERIOD	N(3)	Time period, in years, for the data in radial_growth
SHRUB_SHAPE	VC(1)	A shrub shape.
SHRUB_SIZE	VC(1)	Size class of shrub lifeforms that make up the majority of the shrub vegetation.
SHRUB_VIGOR	VC(1)	A condition of shrub health or productivity.
SNAGS	N(9,4)	The number of snags per acre.
SPECIES_SYMBOL	VC(8)	The NRCS PLANTS code of the species represented by this record. For example, PSME = *Pseudotsuga menziesii*
TE_SPECIES	VC(1)	Flag indicating a threatened, endangered, or sensitive species.

NRV_PERM_GRP_BY (cont.)

Name	Size	Description
TOTAL_CUBIC	N(11,4)	**Computed.** Total cubic foot volume per acre of this class. Representing the total ground-to-tip cubic foot volume of the main stem (does not include branches or foliage) of trees. This is a gross volume that is not associated with merchandising rules so it does not have a net volume counterpart.
TREE_SIZE_CLASS	VC(2)	**Not currently filled**, but the intent is to list the tree size class with the plurality of basal area in the setting, where the tree classes are: 1. 'SAWT' = sawtimber stands (BA/ac of 9+" diameter trees >= BA/ac of 5-8.9" trees or plurality of BA/ac is in trees >= 9" diameter). 2. 'POLE' = poletimber stands (plurality of BA/ac is in trees 5-8.9" diameter) 3. 'SEED' = seedling/sapling stands (plurality of BA/ac is in trees < 5"). 4. 'NONS' = nonstocked (Less than 10% stocked with trees). There is some discussion of developing size classes for shrubs, and, perhaps, herbaceous vegetation, but a national consensus is pending.
VEG_CLASS	VC(2)	Flag indicating the live/dead and standing/down status.
VIGOR	VC(1)	A classification that describes the overall health, vigor, and maturity of tree crowns.
WEIGHT	N(7,4)	Weight, in pounds per acre.
YEAR_OF_ORIGIN	N(4)	The year when the majority of plants within a class were established.

NRV_PERM_MGMT_DIRECTION

This table describes summary data management direction. Much of this data is entered by the user in the "Summary/Perm/Permanent Management Direction" data input form.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
PERM_CHAR_CN ***Required***	VC(34)	A system generated foreign key to Nrv_perm_char

NRV_PERM_MGMT_DIRECTION (cont.)

Name	Size	Description
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
GIS_LINK	VC(26)	The identifier to link the site to the Geographic Information System (GIS) coverage.
MGMT_DIR	VC(20)	Short code to describe the management direction.
MGT_DIR_ALIAS	VC(20)	Management direction name.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.

NRV_PERM_POLY_DISTURBANCES

This table describes summary data disturbances. Much of this data is entered user in the "Summary/Perm/Permanent Poly Disturbances" data input form.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
AGENT_CODE	VC(3)	Disturbance agent code. Example: the southern pine beetle is code "003" under category 11, and the looper is code "003" under category 12. This column is constrained by the codes in Nrv_disturbance_agents.
CATEGORY_CODE	VC(2)	Disturbance category code. Example: root disease is category "21". This column is constrained by the codes in Nrv_disturbance_categories.
DAMAGE_PERCENT	N(3)	Percent of the site affected by the damage.
DATE_ACCURACY	VC(5)	The accuracy of the date stored in disturbance_date.

Code	Description	Use
DAY	Valid to the nearest day.	All
MONTH	Valid to the nearest month.	All
YEAR	Valid to the nearest year.	All
EST	Only an estimate.	All

NRV_PERM_POLY_DISTURBANCES (cont.)

Name	Size	Description
DISTURBANCE_DATE	DATE	The date the site was disturbed. If date is not known enter the year and/or month that is known.
EFFECT_CODE	VC(3)	The effect of damage on the site. This Name is constrained by the codes in Nrv_physical_effects
EFFECT_SEVERITY	VC(3)	Severity of the damage effect. Stored in percent.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
PERCENT_AFFECTED	N(3)	Percent of plants affected by disturbance.
PERM_CHAR_CN	VC(34)	A foreign key to Nrv_perm_char.
PERM_GRP_CN	VC(34)	A foreign key to Nrv_perm_grp.
PLANTS_DAMAGED	N(5)	The number of plants, per acre, affected by a disturbance.
SEVERITY_RATING_CODE	VC(6)	Severity of the disturbance to the site. This column is constrained by the codes in Nrv_severity_ratings.

NRV_PLOT_COUNTS

This table contains tallies of plots, used to aggregate data. These tallies refer to the actual number of plots installed and the standard number of plots installed for a design. A record must exist in Nrv_setting_measurements and optionally in Nrv_sample_designs, before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
COUNT_DESCRIPTION	VC(30)	Description of the data stored in the record and how it is used. Example: PLOTS PER STAND SUBPLOTS PER PLOT
DESIGN_CN	VC(34)	Foreign key to Nrv_sample_designs.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.

Name	Size	Description
PLOTS_INSTALLED	N(4)	Sample elements at this record level per the next higher level. For example, three plots may be installed within a setting, or 7 subplots installed within a plot.
PLOTS_WITH_PLANTS	N(4)	**This column is no longer used.**
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
STANDARD_NO_PLOTS	N(4)	The number of plots that should be, by design, installed.

NRV_REFERENCE_POINTS

This table describing reference points used to locate the setting. This table may contain descriptions of reference points, supplemental reference points, and witness trees used to facilitate plot location. There can be multiple reference point records for each setting record. A record must exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(40)	A system generated sequence number to uniquely identify a row of data in this table.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE	N(6)	The database ID where the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
AZIMUTH	N(3)	Azimuth to plot center (for a reference point), or the azimuth to corner (for a witness tree), or the azimuth to a supplemental reference point (for supplemental points).
AZIMUTH_CORNER	N(3)	The azimuth, in degrees, from the subplot, microplot, annular, or hectare plot center to a corner or curve in a boundary. If a boundary is best described by a straight line between two circumference points, then record 000 for corner azimuth (000 = none).
AZIMUTH_LEFT	N(3)	The azimuth, in degrees, from the subplot, microplot, annular, or hectare plot center to the farthest left point (facing the contrasting condition class) where the boundary intersects the subplot, microplot, annular, or hectare plot circumference.
AZIMUTH_FROM_NAVIGATED_PLOT	N(3)	Azimuth from the plot you came from to this plot.
AZIMUTH_RIGHT	N(3)	The azimuth, in degrees, from the subplot, microplot, annular, or hectare plot center to the farthest right point (facing the contrasting condition class) where the boundary intersects the subplot, microplot, annular, or hectare plot circumference.

NRV_REFERENCE_POINTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>BOUNDARY_CHANGE</td><td>VC(1)</td><td>For re-measurement locations only. The relationship between previously recorded and current boundary information.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>0</td><td>No change - boundary is the same as indicated on plot map by a previous crew.</td><td></td></tr><tr><td>1</td><td>New boundary, or boundary data has been changed to reflect an actual on-the-ground physical change resulting in a difference from the boundaries recorded.</td><td></td></tr><tr><td>2</td><td>Boundary has been changed to correct an error from previous crew.</td><td></td></tr><tr><td>3</td><td>Boundary has been changed to reflect a change in variable definition.</td><td></td></tr></table></td></tr>
<tr><td>CONTRASTING_CONDITION</td><td>VC(1)</td><td>The condition class number that contrasts with the condition class located at the subplot center (for boundaries on the subplot, annular or hectare plot) or at the microplot center (for boundaries on the microplot), e.g. the condition class present on the other side of the boundary line.</td></tr>
<tr><td>CORNER_DIRECTION</td><td>VC(2)</td><td>To help in locating plot, a square plot will have each corner identified.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>NE</td><td>Northeast</td><td></td></tr><tr><td>NW</td><td>Northwest</td><td></td></tr><tr><td>SW</td><td>Southwest</td><td></td></tr><tr><td>SE</td><td>Southeast</td><td></td></tr></table></td></tr>
<tr><td>DIAMETER</td><td>N(6,3)</td><td>Diameter of the reference tree, stored in inches.</td></tr>
<tr><td>DIAMETER_HEIGHT</td><td>N(7,4)</td><td>Height above ground, where the diameter was measured. For example: 4.5 implies a DBH (Diameter breast height) measurement at 4.5 feet above ground, and 0 implies a DRC (diameter at root collar) measurement at ground level. Stored in feet.</td></tr>
<tr><td>DIAMETER_METHOD</td><td>VC(2)</td><td>Method used to measure tree diameter in the Diameter column.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td></td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
</table>

NRV_REFERENCE_POINTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>DISTANCE</td><td>N(8,3)</td><td>Distance to plot center or plot corner (for reference trees), distance to plot center (for Reference Points), or distance to another reference point (for Supplemental Reference Point).</td></tr>
<tr><td>DISTANCE_CORNER</td><td>N(5,2)</td><td>The horizontal distance, to the nearest foot, from the subplot, mircoplot, annular, or hectare pot center to a boundary corner point. Valid values for microplot (1 to 7 ft), subplot (1 to 24 ft), annular plot (1 to 59 ft), hectare plot (1 to 185 ft).</td></tr>
<tr><td>DISTANCE_FROM_NAVIGATED_PLOT</td><td>N(8,3)</td><td>Distance from the plot you came from to this plot.</td></tr>
<tr><td>DISTANCE_METHOD</td><td>VC(2)</td><td>Method used to measure distance from the plot center to the tree.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>C</td><td>Plot center to tree center, horizontal distance</td><td></td></tr>
<tr><td>UC</td><td>Plot center to tree center, uncorrected slope distance</td><td></td></tr>
<tr><td>F</td><td>Plot center to tree face, horizontal distance</td><td></td></tr>
<tr><td>UF</td><td>Plot center to tree face, uncorrected slope distance</td><td></td></tr>
</table>
</td></tr>
<tr><td>MAPCOND_CN</td><td>VC(34)</td><td>Foreign key to Nrv_fia_mapped_conditions.</td></tr>
<tr><td>MARKER_TYPE</td><td>VC(4)</td><td>Type of location marker.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>TREE</td><td>Witness tree</td><td></td></tr>
<tr><td>RP</td><td>Reference point</td><td></td></tr>
<tr><td>SRP</td><td>Supplemental reference point (way point)</td><td></td></tr>
</table>
</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database ID where the record was modified.</td></tr>
<tr><td>MONUMENT_TYPE</td><td>VC(1)</td><td>Whether it is the first (X) or second (Y) of the two required witness trees.</td></tr>
<tr><td>ON_PLOT_FLAG</td><td>VC(1)</td><td>Is the witness tree, reference point, or supplemental reference point on the sample plot?
Y = yes</td></tr>
<tr><td>PLOT_NAVIGATED_FROM</td><td>VC(4)</td><td>Indicates the plot number of the plot that you came from.</td></tr>
</table>

NRV_REFERENCE_POINTS (cont.)

Name	Size	Description
PLOT_TYPE	VC(1)	The type of boundary data for a subplot, microplot, or annular plot. If no boundaries are recorded for a subplot, enter one record with PLOT TYPE = 0. Code / Description / Use: 0 – No boundaries are recorded for the subplot – PNW 1 – Subplot boundary 2 – Microplot boundary 3 – Macro plot boundary 4 – Hectare plot boundary (from subplot 1 only) – PNW
REFERENCE_NO	VC(5)	Each type of reference point (witness tree, reference point, or supplemental reference point) is given a unique number. Example: combining marker code and reference number gives TREE1, TREE2, RP1, SRP1, SRP2, etc.
REMARKS	VC(255)	Remarks relevant to the marker. An example is the type of marker if it is not a tree.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
SPECIES_SYMBOL	VC(8)	The NRCS PLANTS code of the species represented by this record. For example, PSME = *Pseudotsuga menziesii*. Constrained by values in the appropriate TAXA table.
TAG_ID	VC(5)	The number physically attached or assigned to a witness tree.
TRAVEL_DESC	VC(500)	Travel description to the plot or travel description to the witness tree.
WITNESS_TYPE	VC(2)	Constrained by NRV_WITNESS_TYPES reference table.

NRV_SAMPLE_DESIGNS

This table describes a sample design used during data collection. This table may contain the description of sampling rule identifiers uniquely identifying the sampling design used during data collection. There can be multiple sample designs in each setting measurement, one per sample design rule. A record must exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.

NRV_SAMPLE_DESIGNS (cont.)

Name	Size	Description
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
SAMPLE_DESIGN_TYPE	VC(6)	**Not currently Used.**
LENGTH	N(6,3)	Measure of the extent along the greatest dimension of a rectangular or square plot. Stored in feet.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
PURPOSE_CODE	VC(4)	**Not currently used**
REMARKS	VC(255)	Remarks relevant to the sample design.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
SAMPLE_EXPANSION_FACTOR	N(9,4)	The expansion factor corresponds to selection_method_type column. It is used to convert tree or piece data to a per-unit-area basis (acres). The expansion factor is dependent on the selection method selected. Selection Method Expansion Factor FRQ inverse of the fixed area plot BAFbasal area factor of the variable radius plot DBH horizontal line factor TRN length of fixed transect line expressed as a horizontal distance VTR length of variable transect line HSQ vertical point factor used HTSvertical line factor used
SAMPLE_RULE_NO	VC(3)	Unique number to label the different rules within a sample design. This number is defined regionally.

SELECTION_METHOD_TYPE	VC(3)	Method by which trees, shrubs, grasses or debris were selected:

Code	Description	Use
FRQ	Frequency for fixed area plots or linear strip plots.	CSE
BAF	Basal area factor for a variable radius plot.	CSE
TRN	Fixed length transect line.	CSE
DBH	Horizontal line sample—a form of polyareal plot sampling (analogous to variable radius or Horizontal Sampling) where the sampled trees are selected by projecting horizontal angle at right angles to a line. The plot associated with any given tree is rectangular and its area (or width) is a linear function of tree diameter.	
VTR	Variable length transect line.	
HSQ	Vertical point sample—a form of polyareal plot sampling (analogous to variable radius or Horizontal Point Sampling) where the sampled trees are selected by projecting a vertical angle around a point. The plot associated with any given tree is circular and its area (or radius squared) is a linear function of tree height squared.	
HTS	Vertical line sample—a form of polyareal plot sampling (analogous to variable radius or Horizontal Point Sampling) where the sampled trees are selected by projecting a vertical angle at right angles to a line. The plot associated with any given tree is rectangular and its area (or width) is a linear function of tree height.	
MIC	Microplot (Daubenmire range plots).	
MAC	Macroplot (Daubenmire range plots).	

NRV_SAMPLE_DESIGNS (cont.)

Name	Size	Description
SETTING_DESIGN_CODE	VC(4)	FIADB Plot Table variable. The type of plot design used to collect data. 1 = National FIA mapped plot design with 4 fixed-radius subplots 100-199 = Northeastern Station designs 200-299 = Southern Station designs 300-399 = North Central Station designs 400-499 = Rocky Mountain Station designs 500-599 = Pacific Northwest Station designs 600-699 = Alaska designs
TRANSECT_AZIMUTH	N(3)	Azimuth used to establish the transect line.
WIDTH	N(6,3)	The measurement of the extent from side to side of a rectangular or square plot. Stored in feet.

NRV_SELECTION_CRITERIA

This table describes the selection criteria used during data collection. This table contains descriptions of unique subpopulations. There can be multiple selection criteria for each sample design record within a setting. A record must already exist in Nrv_sample_designs before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
DESIGN_CN ***Required***	VC(34)	Foreign key to Nrv_sample_designs.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
ROW_ACCESS_CODE	VC(6)	Control field to support role level access.
SELCRIT_CN_OF	VC(34)	Foreign key to Nrv_selection_criteria for recursive columns. This column is NOT currently used and should NOT be populated. Contact the FSVeg staff for proper implementation of recursive functionality in this table.

NRV_SELECTION_CRITERIA (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SELECTION_CRITERIA_NO
Required</td><td>VC(3)</td><td>A number to label each selection criteria record within an inventory. This number is usually unique for each selection criteria record in an inventory. If two or more selection criteria, within the same inventory, share the same selection criteria number, then they are linked by an implied “AND” condition; and hence a sample item must meet ALL of the linked selection criteria in order to be sampled.</td></tr>
<tr><td>SUBPOP</td><td>VC(3)</td><td>Characteristic used to define the sampled population.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>DBH</td><td>Diameter at breast height</td><td>CSE</td></tr>
<tr><td>DRC</td><td>Diameter at root collar</td><td>CSE</td></tr>
<tr><td>HGT</td><td>Height</td><td>CSE</td></tr>
<tr><td>CVR</td><td>Percent of vegetation cover</td><td>CSE</td></tr>
<tr><td>SVC</td><td>Percent of ground surface cover</td><td>CSE</td></tr>
<tr><td>LGT</td><td>Length</td><td>CSE</td></tr>
<tr><td>DIA</td><td>Diameter at midpoint or intersection</td><td>CSE</td></tr>
<tr><td>DMG</td><td>Tree damage category</td><td>CSE</td></tr>
<tr><td>SPP</td><td>Species</td><td>CSE</td></tr>
<tr><td>STS</td><td>Tree class</td><td></td></tr>
</table></td></tr>
<tr><td>SUBPOP_CODE_VALUE</td><td>VC(8)</td><td>Subpopulation characteristic code. This value is used in conjunction with the “SUBPOP” value to further define the sampled population.

<u>SUBPOP</u> <u>Valid SUBPOP_CODE_VALUES</u>
CVR LIVE, DEAD, ALL
DBH LIVE, DEAD, ALL, DOWN, HARD*, SOFT*
DIA LIVE, DEAD, ALL, DOWN, STUMPS
DMG a disturbance category code from NRV_Disturbance_Agents
DRC LIVE, DEAD, ALL, DOWN, CLUMPS, HARD*, SOFT*
HGT LIVE, DEAD, ALL
LGT LIVE, DEAD, ALL, DOWN
SPP a Species Symbol from the tree TAXA table*
STS LIVE, DEAD, ALL, STUMPS, CLUMPS, DOWN
SVC not used for this SUBPOP code

* Can be used with ‘-L, ‘-D,’ and ‘-A’ suffixes to denote standing live, standing dead, and all standing live and dead, respectively, but are not used with CSE.</td></tr>
<tr><td>SUBPOP_MAX_VALUE</td><td>N(13,4)</td><td>Maximum value for the subpopulation characteristic. If the Subpop column is DBH, DIA, DRC, LGT, or HGT, enter the maximum value. DBH, DIA, and DRC are stored in inches. LGT and HGT are stored in feet.</td></tr>
<tr><td>SUBPOP_MIN_VALUE
Required</td><td>N(13,4)</td><td>Minimum value for the subpopulation characteristic. If the Subpop column is DBH, DIA, DRC, LGT, or HGT, enter the minimum value.</td></tr>
</table>

NRV_SELECTION_CRITERIA (cont.)

Name	Size	Description
TALLY_FLAG	VC(1)	Was the subpopulation data collected with a tally count (i.e., diameter and height were not recorded, but species and tree count were)? Y = Data was collected via a tally method.

NRV_SETTING_DISTURBANCES

This table describes setting disturbances. There can be multiple setting disturbance records for each setting record. A record must already exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
SETMEAS_CN Required	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID Required	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
AGENT_CODE	VC(3)	Disturbance agent code. Example: the southern pine beetle is code "003" under category 11, and the looper is code "003" under category 12. This column is constrained by the codes in Nrv_disturbance_agents.
CATEGORY_CODE	VC(2)	Disturbance category code. Example: root disease is category "21". This column is constrained by the codes in Nrv_disturbance_categories.
DAMAGE_PERCENT	N(3)	Percent of the setting affected by a disturbance agent.
DATE_ACCURACY	VC(5)	Indicates the accuracy of the disturbance date. **Code** / **Description** / **Use** DAY / Valid to the nearest day / MONTH / Valid to the nearest month / YEAR / Valid to the nearest year / EST / Only an estimate /
DISTURBANCE_DATE	DATE	The date (day, month, year) in which the disturbance activity occurred. The format is 2-digit day, 3-character month abbreviation (JAN-DEC), and 4-digit year.
EFFECT_CODE	VC(3)	Physical disturbance effect code. This column is constrained by the codes in Nrv_physical_effects.

NRV_SETTING_DISTURBANCES (cont.)

Name	Size	Description
EFFECT_SEVERITY	VC(3)	All effects have a severity from 1-100, which indicates the percent of the setting affected by an effect, except for effect codes of 12 and 22, which use only a "1" (minor, affecting growth) or a "2" (severe, survivability) severity.
MAPCOND_CN	VC(34)	Foreign key to Nrv_fia_mapped_conditions.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
SEVERITY_RATING_CODE	VC(6)	Disturbance severity rating codes. These codes estimate the severity of a specific disturbance to the plot. This column is constrained by the codes in Nrv_severity_ratings.

NRV_SETTING_HISTORIES

This table describes setting and plot activity history. There can be multiple history records for each setting or plot record. A record must already exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
HISTORY_CODE ***Required***	VC(6)	History code. These codes relate to common forest management activities. The codes came from the TIM/FACTS effort and may be changing over time. This column is constrained by the codes in Nrv_history_codes.
SETMEAS_CN ***Required***	VC(34)	Foreign key to the table Nrv_setting_measurements.
DATE_ACCURACY	VC(5)	Indicates the accuracy of the history date. **Code** / **Description** / **Use** DAY / Valid to the nearest day / MONTH / Valid to the nearest month / YEAR / Valid to the nearest year / CSE EST / Only an estimate /
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.

NRV_SETTING_HISTORIES (cont.)

Name	Size	Description
HISTORY_DATE	DATE	The date (day, month, year) in which the activity occurred. The format is 2-digit day, 3-character month abbreviation (JAN-DEC), and 4-digit year.
MAPCOND_CN	VC(34)	Foreign key to Nrv_mapped_conditions.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.

NRV_SETTING_MEASUREMENTS

This table contains columns describing the setting. There should be one record per setting.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
ACRES_GIS	N(10,2)	Total area of the setting, **computed by the GIS**. Examples: If measuring a stand, it is the size of the stand, if measuring on a grid; it is the area of the sample (cluster or plot). This is not to be confused with the area expansion factor for a plot or stratum etc. Stored in acres.
AGENCY	VC(4)	Governing agency. This column is constrained by the codes in Nrv_owner_agency_codes.
AIRPH_CN	VC(34)	Foreign key to Nrv_aerial_photos. This will identify the aerial photo associated with this setting.
ARCHIVE_DATE	DATE	The date the record was archived
ARCHIVE_FLAG	VC(1)	Flag to indicate that this setting measurement record does not represent the current status of the vegetation. The setting vegetation has been altered by an event such as fire or harvest. This flag is also used when the setting measurement record has been replaced with a more recently obtained record. Y = Yes, this is an archived record.

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
ASPECT	N(3)	General direction of downslope, in degrees azimuth, which the setting faces. 0 = flat 360 = north 999 = Indeterminate, undulating, or no predominant slope
AZIMUTH	N(3)	The direction, going clockwise from due North, to some object. Valid values are from 0 (due North) to 360 where 180 is due south. This column was added to support FIA data during analysis of FIA datasets. It is unclear how this will be used in the future.
AZIMUTH_TO_PLOT_CENTER	N(3)	The azimuth from the location where coordinates were collected to actual plot center. If coordinates are collected at plot center, record 000. Valid values are 000 to 360.
BUFFER_FLAG	VC(1)	Flag to indicate if there is a buffer of similar condition and treatment around the plot. Y = Yes, there is a buffer.
BUFFER_WIDTH	N(6,2)	Average width of the buffer of similar condition and treatment around the plot. Stored in feet.
CANOPY_CLOSURE	N(3)	Amount of the setting covered by the crowns of trees. Stored in percent.
CANOPY_CLOSURE_METHOD	VC(2)	Method used to determine canopy closure. Code / Description / Use M / Measured E / Estimated C / Calculated
CAPABLE_GROW_AREA_PCT	N(3)	The area capable of growing trees. Stored in percent.
COLLECTOR_VERSION	VC(15)	The version of the PDR software used to collect the data. The PNW Regional data will store the DATA_RECORDER_NUMBER in this field. This field will only be populated at the parent record of the setting not the child record. PNW manual version # will start with 1.0.0 at the beginning of the field season. If minor modifications to the data recorder program are made in response to changes in field procedures or programming requirements, the z field will be changed to z+1. If more significant changes are made, the y field will be changed to y+1. The first field (x) will be changed only in the event of a major modification to the program.
COMPARTMENT_NO	VC(10)	Division of forest for purposes of orientation, administration, and silvicultural operations. It is defined by permanent boundaries, of natural features or artificially marked. This field is only populated for legacy data. For stand exam data use the location field.
CONDITION_STATUS_CHANGE	VC(1)	RMRS Condition Class VARIABLE. See RMRS Field manual for a definition of the four valid codes: 1, 2, 3, and 4.

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
CONSEC_PT_NUM	VC(8)	For FIA use. Each FIA plot has a unique point number to locate the plot on a quad map. The combination of state, plot, and point number uniquely identifies a plot and its location within a state.
COUNTY	VC(3)	Numeric County code where the setting is located.
CYCLE_LENGTH	N(2)	Cycle length. The number of years needed to complete all five panels. The 1998 Farm Bill contained an unfunded mandate that annual inventories be conducted with a completion of the five panels in 5 years. Due to limited funding the cycle length often exceeds five years, especially in the west and Alaska.
CYCLE_PREVIOUS	N(2)	Previous inventory cycle number. Identifies the most recent prior cycle number.
CYCLE_NUMBER	N(2)	FIADB Survey Table variable. Inventory cycle number. For example, a 4 shows the data came from the fourth inventory of that State. A cycle number greater than 1 does not necessarily mean that information for previous cycles resides in the database.
DATA_CODE_1	VC(16)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_1_DEFINITION	VC(160)	Define the value stored in data_code_1.
DATA_CODE_2	VC(16)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_2_DEFINITION	VC(160)	Define the value stored in data_code_2.
DATA_CODE_3	VC(16)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_3_DEFINITION	VC(160)	Define the value stored in data_code_3.
DATA_CODE_4	VC(16)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_4_DEFINITION	VC(160)	Define the value stored in the data_code_4.
DATA_NUM_1	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_1_DEFINITION	VC(160)	Define the value stored in the data_num_1.
DATA_NUM_2	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_2_DEFINITION	VC(160)	Define the value stored in the data_num_2.
DATE_ACCURACY	VC(5)	Record the accuracy of the value in measurement_date. **Code** / **Description** / **Use** DAY / Valid to the nearest day / CSE MONTH / Valid to the nearest month / YEAR / Valid to the nearest year / EST / Only an estimate /

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
DECLINATION	N(5,1)	The azimuth correction used to adjust magnetic north to true north. All azimuths are assumed to be magnetic azimuths unless otherwise designated. This field is used only where units are adjusting azimuths to correspond to true north; for units using magnetic azimuths, this field will always be set to "0" in the office. This field carries a decimal place because the USGS corrections are provided to the nearest half-degree. Declination is defined as True North - Magnetic North.
DISTANCE_TO_PLOT_CENTER	N(4)	The horizontal distance, in feet, from the location where the coordinates were collected to the actual plot center. If coordinates are collected at plot center, the value is 000.
DISTRICT_NO	VC(2)	Ranger district number of the administrator or owner for the setting (sample location).
ECOREGION	VC(7)	Stores regional and sub-regional ecological units (subsections) that nest within, and refine successively larger ecological units (Bailey et. al 1995 revised) developed according to the classification scheme of the National Hierarchical Framework of Ecological Units (Avers et. Al. 1994). Subsections for the Eastern United States are documented in Keys, James E. et. al. 1995. This code includes an optional 1-character for mountain, 1-digit for domain, 1-digit for division, 1-digit for province, 1-character for section, and 1-character for subsection. For example; the code M212Bd is decoded as M = mountain, 2 = humid temperate domain, 1 = warm continental Regime Mountains division, 2 = Adirondack-New England Mixed Forest - Coniferous Forest-Alpine meadow province, B = New England Piedmont section, and d = Hillsboro Inland Hills and Plains subsection.
ELEVATION	N(6,1)	Height above sea level. Stored in feet.
ELEVATION_METHOD	VC(2)	How the elevation was derived.
EV_CODE	VC(10)	Existing vegetation code for this setting. This column is constrained by the codes in Nrv_ev_cover_types.
EV_REF_CODE	VC(10)	Document from which the ev_code was obtained. This column is constrained by the codes in Nrv_cover_references.
FIRE_INFO_FK	VC(34)	Foreign key to Nrv_fire_info. Indicates what, if any, fire is associated with a given setting record.
FOREST_ADMIN	VC(2)	Administrative Forest number.
FOREST_PROC	VC(2)	Proclaimed Forest number.
FSVEG_ID	VC(40)	Unique value which, once assigned, is never changed. If the exam is re-loaded via the loader program, the value on the exam is reset.
FUEL_MODEL	VC(3)	Fuel model used in this setting.
FUEL_PHOTO_FK	VC(34)	Foreign key to the nrv_fuel_photos table, which contains the document where the fuel photo was obtained, or the residue description photo. Column is only to be used on the plot record.

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
FUEL_PHOTO_REFERENCE	VC(10)	Foreign key to the nrv_fuel_photo_ref table. Number of the fuel photo reference used. Column is only to be used on the stand record.
GCN	VC(34)	System generated key to link records in this table to polygons in a GIS map. This column will be eliminated in future versions. Use the GIS-Link column instead.
GEOGRAPHICAL_AREA	VC(5)	Geographical area code for locations not on a Forest Service site.
GEOREFERENCE_METHOD	VC(11)	The method used to determine the georeference of the setting: Description / Use GEODETIC / CSE STATE PLANE UTM
GIS_LINK	VC(26)	The identifier to link the setting to a Geographic Information System (GIS) coverage.
HEIGHT_GROWTH_INTERVAL	N(2)	Time period over which height growth is measured. Stored in years. Values less than 1 are not allowed.
HEX_NUMBER	VC(7)	The id number for each plot, unique within a county. This is the hexagon number on the plot jacket. It is a unique hex number within a state. Valid values are 1-99999.
HYDROLOGIC_UNIT_CODE	N(12)	PNW Regional variable. The watershed where the field grid point is located.
I_M_FLAG	VC(1)	Populated on stand only. If Y this is data that will be or is measured multiple times.
IMAGE_FLAG	VC(1)	Flag to indicate if a set of special images (photos, landsat etc.) of this setting was taken. This does not refer to aerial photos taken on a general flight path. Y= Yes, a set of images was taken.
INCLUSION_ACRES	N(8,4)	The size of the area different from the prevalent condition, yet too small to qualify as a separate condition class. PNWRS attribute.
INCLUSION_ACRES_TYPE	VC(2)	Type of inclusion; 0 = None 1 = Hardwood inclusion 2 = Softwood inclusion 3 = Wildlife feature 4 = Water feature 5 = Rocks 6 = Heritage feature 7 = Insect/Disease area 8 = Opening 9 = Other 10 = Bogs and seeps NF = Non-forest inclusion. PNWRS attribute
LATITUDE_DEG	N(3)	Degree portion of the angular distance, North of the equator. Stored in degrees. Only positive values, 18-71 inclusive, are allowed.

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
LATITUDE_GIS	N(11,6)	Latitude of the spatial point feature class. This field is populated by FSVeg Spatial only
LATITUDE_MIN	N(2)	Minute portion of the angular distance, North of the equator. Stored in minutes. Only positive values, 0-59 inclusive, are allowed.
LATITUDE_SEC	N(4,2)	Second portion of the angular distance, North of the equator. Stored in seconds. Only positive values, 0-59.99 inclusive, are allowed.
LAT_LON_DATUM	VC(50)	Reference datum of latitude and longitude. Valid values for CSE are "NAD27", "NAD83" and "WGS84"
LEVEL_1_ALIAS	VC(12)	Name given to the level_1_id by a specific sampling protocol. **Description** / **Use** STAND / CSE CLUSTER / FIA
LEVEL_1_ID	VC(10)	Uniquely identify a sample unit within a setting. The sampling units may be plots, points, transects etc. A setting may have more than one level_1_id. Examples: For stand exams, this is the stand or polygon number. For grid inventories, this is the cluster plot number, although no data may be sampled on the cluster. For range and ecology plots, this is the site.
LEVEL_2_ALIAS	VC(12)	Name given to the level_ 2_id by a specific sampling protocol. **Description** / **Use** PLOT / CSE/FIA
LEVEL_2_ID	VC(10)	Used to uniquely identify each element within a sub sample. For stand exams, this is the plot. For grid inventories, this may be the parent plot number. For range or ecology plots this may be transect, microplot, or macroplot, depending on the design. FIA National Core Data: 1 = Center 2 = North 3 = Southeast 4 = Southwest

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
LEVEL_3_ALIAS	VC(12)	Name given to the level_3_id by a specific sampling protocol. Examples: Description / Use SUBPLOT MICROPLOT FIA_MICROPLOT — FIA TRANSECT — FIA For FIA data this value is set to "FIA_Microplot."
LEVEL_3_ID	VC(10)	Used to uniquely identify each element within a sub sample. For grid inventories, this may be the sub plot number. For range or ecology plots, this may be a microplot for one sample design. The FIA National core data seedling micro-plot number. Currently there is only 1 micro-plot per subplot.
LEVEL_4_ALIAS	VC(12)	Name given to the level_4_id by a specific sampling protocol
LEVEL_4_ID	VC(10)	Used to uniquely identify each element within a sub sample. Since this level is provided for future flexibility, examples are not provided.
LEVEL_5_ALIAS	VC(12)	Name given to the level_5_id by a specific sampling protocol.
LEVEL_5_ID	VC(10)	Uniquely identify each element within a subsample. Since this level is provided for future flexibility, examples are not provided.
LEVEL_6_ALIAS	VC(12)	Name given to the level_6_id by a specific sampling protocol.
LEVEL_6_ID	VC(10)	Uniquely identify each element within a subsample. Since this level is provided for future flexibility, examples are not provided.
LOADER_VERSION	VC(15)	The version of the forms, PDR loader, or legacy data software used to load data into the database. For FIA data, the legacy Regional loaders are populated with a version number that corresponds to the date of program compilation. This field contains the loader compilation date and is populated only at the parent record of the setting not the child record.
LOCATION	VC(16)	The location of the stand within a Region, Forest, and District.
LONGITUDE_DEG	N(3)	Degree portion of the angular distance East or West of the prime meridian at Greenwich, England. Stored in degrees. For CSE, these values must be positive. For all, only values, 44-172 inclusive, are allowed.
LONGITUDE_GIS	N(11,6)	Longitude of the spatial point feature class. This field is populated by FSVeg Spatial only
LONGITUDE_MIN	N(2)	Minute portion of the angular distance East or West of the prime meridian at Greenwich England. Stored in minutes. Only positive values (West), 0-59 inclusive, are allowed.
LONGITUDE_SEC	N(4,2)	Second portion of the angular distance East or West of the prime meridian at Greenwich England. Stored in seconds. Only positive values (West), 0-59.99 inclusive, are allowed.

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>MAINTENANCE_STATUS</td><td>VC(2)</td><td>Indicates the maintenance status of a plot.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>A</td><td>Active</td><td></td></tr>
<tr><td>I</td><td>Inactive</td><td></td></tr>
<tr><td>D</td><td>Destroyed</td><td></td></tr>
<tr><td>1</td><td>Initial plot establishment - field visited or remotely classified.</td><td>FIA</td></tr>
<tr><td>2</td><td>Re-measurement of a previously established National design plot – field visited or remotely classified.</td><td>FIA</td></tr>
<tr><td>3</td><td>Replacement plot - a previously established National design plot that was replaced with a new plot because the original plot could not be relocated or because plot data were lost.</td><td>FIA</td></tr>
<tr><td>4</td><td>Modeled</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>MANAGEMENT_TYPE</td><td>N(3)</td><td></td></tr>
<tr><td>MANAGEMENT_PRODUCTIVITY</td><td>N(1)</td><td>An indicator of the mean annual increment of stand growth. It is a code representing the number of cubic feet per acre that the stand is expected to grow per year. Productivity is based on the management_type, management_type_site _index and the geographical location of the stand (i.e., mountains, flatwoods or bottomlands). Valid codes are:
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>0</td><td>None (water or non-forested)</td></tr>
<tr><td>1</td><td>225 or more cubic feet per acre per year</td></tr>
<tr><td>2</td><td>165-224 cubic feet per acre per year</td></tr>
<tr><td>3</td><td>120-164 cubic feet per acre per year</td></tr>
<tr><td>4</td><td>85-119 cubic feet per acre per year</td></tr>
<tr><td>5</td><td>50-84 cubic feet per acre per year</td></tr>
<tr><td>6</td><td>20-49 cubic feet per acre per year</td></tr>
<tr><td>7</td><td>Less than 20 cubic feet per acre per year</td></tr>
<tr><td>9</td><td>Unknown</td></tr>
</table></td></tr>
<tr><td>MEASUREMENT_DATE</td><td>DATE</td><td>The date the setting was measured. If date is not known enter the year and/or month that is known.</td></tr>
<tr><td>MEASUREMENT_NO</td><td>VC(4)</td><td>Sequential number to identify the measurement sequence of a re-measured setting or plot; installation, measurement 1, etc.
1 = Initial installation, default
2 = First re-measurement, etc.</td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>MEASUREMENT_ORGANIZATION</td><td>VC(15)</td><td>Organization or person responsible for data collection.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td></td><td>Examiner name</td><td>CSE</td></tr>
<tr><td>22</td><td>Rocky Mountain Research Station</td><td>FIA - RMRS</td></tr>
<tr><td>23</td><td>North Central Research Station</td><td>FIA - NCRS</td></tr>
<tr><td>24</td><td>Northeast Research Station</td><td>FIA - NERS</td></tr>
<tr><td>26</td><td>Pacific Northwest Research Station</td><td>FIA - PNW</td></tr>
<tr><td>27</td><td>Alaska - Pacific Northwest Research Station</td><td>FIA - AKPNWRS</td></tr>
<tr><td>33</td><td>Southern Research Station</td><td>FIA - SRS</td></tr>
</table>
</td></tr>
<tr><td>MEAS_STD_ID</td><td>VC(12)</td><td>Foreign key to Nrv_measurement_standards. Identifies the measurement standards used throughout the setting.</td></tr>
<tr><td>MERIDIAN_CODE</td><td>VC(2)</td><td>The principal meridian, defined as the line from which the survey of township boundaries along the parallels is initiated. This column is constrained by Nrv_principal_meridians.</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database ID where the record was modified.</td></tr>
<tr><td>NFS_LAND_CLASS</td><td>VC(3)</td><td>Current land class used for NFS data. A classification that indicates the basic land cover.</td></tr>
<tr><td>OWNER</td><td>VC(4)</td><td>The agency that owns the land the setting is located on. This column is constrained by Nrv_owner_agency_codes.

For FIA data this value is the owner class code that best corresponds to the ownership (or the managing agency for public lands) of the land in the condition class.</td></tr>
<tr><td>PHYSIOGRAPHIC_CLASS</td><td>VC(3)</td><td>Foreign key to Nrv_physiographic_classes. The physiographic class of the subplot: landform, topographic position, and soil generally determine the physiographic class. More detailed definitions can be found in PNW Field Guide pg. 43-44.</td></tr>
<tr><td>PLS_RANGE</td><td>VC(5)</td><td>Range where the setting is located. For example, 0590W is Range 59 West, and 1093E is Range 109 3/4 East.</td></tr>
<tr><td>PLS_SECTION</td><td>VC(2)</td><td>Section where the setting is located. Valid numbers are 1-36.</td></tr>
<tr><td>PLS_SUBDIVISION</td><td>VC(4)</td><td>Portion of a Section where the setting is located. Sections are divided in sixteen equal parts of 40 acres each. Example: NWSE indicates the SE quarter of the NW quarter.</td></tr>
<tr><td>PLS_TOWNSHIP</td><td>VC(5)</td><td>Township where the setting is located. For example, 1010N is Township 101 North, and 0292S is Township 29 1/2 South.</td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>PREVIOUS_SETTING_ID</td><td>VC(30)</td><td>If setting_id has changed, for example renumbering the setting, this column contains the previous setting ID. The value contained in the setting_id field is considered the current setting ID.</td></tr>
<tr><td>PROJECT_NAME</td><td>VC(25)</td><td>Defined by the organization. Project names or identifiers should be consistent when applied to multiple settings. This column is used to retrieve information for all plots installed under the same project or to list a particular survey type. Examples are: R3 RMSTAND, INTENSIVE, INFGRIP94_1, INTERMOUNTAIN FIA, BURNT BACON CREEK, and COLUMBIA RIVER BASIN.</td></tr>
<tr><td>PURPOSE_CODE</td><td>VC(4)</td><td>Code that represents the reason for the survey. This column is constrained by Nrv_exam_purpose_codes</td></tr>
<tr><td>PV_CODE</td><td>VC(10)</td><td>Potential vegetation for this setting. A partial list of codes is located in Nrv_pv_cover_types, however this column is not constrained by this set of codes.</td></tr>
<tr><td>PV_REF_CODE</td><td>VC(10)</td><td>Document from which the pv_code was obtained. This column is constrained by Nrv_cover_references.</td></tr>
<tr><td>RADIAL_GROWTH_INTERVAL</td><td>N(2)</td><td>Time period over which radial_growth is measured. Stored in years. Values less than 1 are not allowed.</td></tr>
<tr><td>RADIAL_GROWTH_INTERVAL_2</td><td>N(2)</td><td>Time period over which radial_growth_2 is measured. Stored in years. Values less than 1 are not allowed.</td></tr>
<tr><td>RECENT_MORTALITY_YEARS</td><td>N(2)</td><td>Time period defining the term “recent mortality.” Stored in years.</td></tr>
<tr><td>REGION_ADMIN</td><td>VC(2)</td><td>Administrative Region number.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>01</td><td>Northern Region</td><td>CSE</td></tr>
<tr><td>02</td><td>Rocky Mountain Region</td><td>CSE</td></tr>
<tr><td>03</td><td>Southwest Region</td><td>CSE</td></tr>
<tr><td>04</td><td>Intermountain Region</td><td>CSE</td></tr>
<tr><td>05</td><td>Pacific Southwest Region</td><td>CSE</td></tr>
<tr><td>06</td><td>Pacific Northwest Region</td><td>CSE</td></tr>
<tr><td>08</td><td>Southern Region</td><td>CSE</td></tr>
<tr><td>09</td><td>Eastern Region</td><td>CSE</td></tr>
<tr><td>10</td><td>Alaska Region</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>REGION_PROC</td><td>VC(2)</td><td>Proclaimed Region number.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>01</td><td>Northern Region</td><td>CSE</td></tr>
<tr><td>02</td><td>Rocky Mountain Region</td><td>CSE</td></tr>
<tr><td>03</td><td>Southwest Region</td><td>CSE</td></tr>
<tr><td>04</td><td>Intermountain Region</td><td>CSE</td></tr>
<tr><td>05</td><td>Pacific Southwest Region</td><td>CSE</td></tr>
<tr><td>06</td><td>Pacific Northwest Region</td><td>CSE</td></tr>
<tr><td>08</td><td>Southern Region</td><td>CSE</td></tr>
<tr><td>09</td><td>Eastern Region</td><td>CSE</td></tr>
<tr><td>10</td><td>Alaska Region</td><td>CSE</td></tr>
</table></td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
REGISTRATION_CODE	VC(4)	
REMARKS	VC(255)	Remarks about this setting.
REMEASUREMENT_PERIOD	N(3,1)	FIADB Plot Table variable The number of years between measurements of re-measured plots. This variable is set to -1 for new plots. Remeasurement period is based on the number of growing seasons between measurements. Allocation of parts of the growing season by month is different for each FIA program.
RESERVE_CLASS	VC(2)	Reserved status class. Indicates if the setting is reserved from timber harvesting. **Code** / **Description** / **Use** 0 / Non-reserved / FIA 1 / Reserved / FIA
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
RPA_LAND_CLASS	VC(2)	Current land class used for RPA data. A classification to indicate basic land cover. **Code** / **Description** / **Use** 1 / Accessible forest / 2 / Nonforest / 3 / Noncensus water / 4 / Census water / 5 / Denied access / 6 / Hazardous / 7 / Not in the sample /
SAMPLE_DESIGN_TREE	VC(1)	Intensity to which the tree data was collected. **Code** / **Description** / **Use** 0 / Tree data was not collected. / CSE 1 / Tree data was collected with a quick plot. / CSE 2 / Tree data was collected with an extensive survey. / CSE 3 / Tree data was collected with an intensive survey. / CSE

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SAMPLE_DESIGN_VEG</td><td>VC(1)</td><td>Intensity to which the vegetation data was collected.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Vegetation data was not collected.</td><td>CSE</td></tr>
<tr><td>1</td><td>Vegetation data was collected with a quick plot.</td><td>CSE</td></tr>
<tr><td>2</td><td>Vegetation data was collected with an extensive survey.</td><td>CSE</td></tr>
<tr><td>3</td><td>Vegetation data was collected with an intensive survey.</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>SAMPLE_DESIGN_DW</td><td>VC(1)</td><td>Intensity to which the down woody data was collected.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Down woody data was not collected.</td><td>CSE</td></tr>
<tr><td>1</td><td>Down woody data was collected using a protocol other than Brown’s.</td><td>CSE</td></tr>
<tr><td>2</td><td>Down woody data was collected using Brown’s protocol.</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>SAMPLE_DESIGN_SC</td><td>VC(1)</td><td>Intensity to which surface cover data was collected.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>Surface cover data was not collected.</td><td>CSE</td></tr>
<tr><td>1</td><td>Surface cover data was collected.</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>SEED_WALL_DISTANCE</td><td>N(5,1)</td><td>Distance from the setting to the boundary of an adjoining setting where there are seed-producing trees. Residual trees, remaining in the setting after the regeneration cut, are not a "seed wall," even though they may provide a seed source. Stored in feet.</td></tr>
<tr><td>SETMEAS_CN_OF</td><td>VC(34)</td><td>Foreign key to Nrv_setting_measurements.</td></tr>
<tr><td>SETTING_ID</td><td>VC(30)</td><td>Uniquely identifies the setting where the data are collected. This field may contain the following information: For stand exams - Region, Forest, District, Location, and Stand Number. For annual FIA data – State(2)//Survey Unit(2)//County(3)//Plot(5)</td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SETTING_ORIGIN</td><td>VC(2)</td><td>Source of vegetation on the setting. Synonymous with Stand Origin.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>Natural vegetation - no evidence of artificial regeneration.</td><td></td></tr>
<tr><td>2</td><td>Evidence of artificial regeneration - less than 40%.</td><td></td></tr>
<tr><td>3</td><td>Evidence of artificial regeneration - 40% or more.</td><td></td></tr>
<tr><td>4</td><td>Harvested recently - regeneration not yet evident.</td><td></td></tr>
<tr><td>5</td><td>Evidence of artificial regeneration – percentage not estimated.</td><td></td></tr>
<tr><td>7</td><td>Forest land encroachment</td><td></td></tr>
</table></td></tr>
<tr><td>SETTING_SIZE</td><td>N(8,4)</td><td>Total area of the setting. Examples: If measuring a stand, it is the size of the stand, if measuring on a grid; it is the area of the sample (cluster or plot). This is not to be confused with the area expansion factor for a plot or stratum etc. Stored in acres.</td></tr>
<tr><td>SLOPE</td><td>N(3)</td><td>Ratio of vertical rise to horizontal distance for the setting. Stored in percent.</td></tr>
<tr><td>SLOPE_POSITION</td><td>VC(2)</td><td>Primary position of a setting on a slope.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>SU</td><td>Summit</td><td>CSE</td></tr>
<tr><td>SH</td><td>Shoulder</td><td>CSE</td></tr>
<tr><td>BS</td><td>Backslope</td><td>CSE</td></tr>
<tr><td>FS</td><td>Footslope</td><td>CSE</td></tr>
<tr><td>TS</td><td>Toeslope</td><td>CSE</td></tr>
<tr><td>VB</td><td>Valley bottom</td><td>CSE</td></tr>
</table></td></tr>
<tr><td>SLOPE_SHAPE_HORIZ</td><td>VC(2)</td><td>Horizontal slope shape of the land surface.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>BR</td><td>Broken</td><td>CSE</td></tr>
<tr><td>CC</td><td>Concave</td><td>CSE</td></tr>
<tr><td>CV</td><td>Convex</td><td>CSE</td></tr>
<tr><td>LL</td><td>Linear or planar</td><td>CSE</td></tr>
<tr><td>PA</td><td>Patterned</td><td>CSE</td></tr>
<tr><td>UN</td><td>Undulating</td><td>CSE</td></tr>
<tr><td>UA</td><td>Unable to assess</td><td>CSE</td></tr>
<tr><td>FL</td><td>Flat</td><td></td></tr>
</table></td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SLOPE_SHAPE_VERT</td><td>VC(2)</td><td>Vertical slope shape of the land surface.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>BR</td><td>Broken</td><td>CSE</td></tr>
<tr><td>CC</td><td>Concave</td><td>CSE</td></tr>
<tr><td>CV</td><td>Convex</td><td>CSE</td></tr>
<tr><td>LL</td><td>Linear or planar</td><td>CSE</td></tr>
<tr><td>PA</td><td>Patterned</td><td>CSE</td></tr>
<tr><td>UN</td><td>Undulating</td><td>CSE</td></tr>
<tr><td>UA</td><td>Unable to assess</td><td>CSE</td></tr>
<tr><td>FL</td><td>Flat</td><td></td></tr>
</table></td></tr>
<tr><td>SPATIAL_LINK</td><td>VC(1)</td><td>Indicates if the setting record is linked to a spatial feature.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>Null</td><td>Default, record has never been linked</td><td>CSE</td></tr>
<tr><td>Y</td><td>Yes, there is a current linkage to a feature class</td><td>CSE</td></tr>
<tr><td>N</td><td>No, there should not be a linkage to a feature class. The use must explicitly set this value to N using the spatial client tools</td><td>CSE</td></tr>
<tr><td>H</td><td>Historical, the record is linked to a feature in a historical feature class. It is not linked to a feature in the current data set.</td><td></td></tr>
<tr><td>A</td><td>Archived, the record was never spatially linked but is now archived</td><td></td></tr>
</table></td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>STAND_CONDITION</td><td>N(2)</td><td>Stand Condition Class. The following are Region 8 codes:
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>In Regeneration</td><td></td></tr>
<tr><td>2</td><td>Damaged pole timber</td><td></td></tr>
<tr><td>3</td><td>Damaged sawtimber</td><td></td></tr>
<tr><td>4</td><td>Forest pest infestation</td><td></td></tr>
<tr><td>5</td><td>Sparse pole timber</td><td></td></tr>
<tr><td>6</td><td>Sparse sawtimber</td><td></td></tr>
<tr><td>7</td><td>Low quality pole timber</td><td></td></tr>
<tr><td>8</td><td>Low quality sawtimber</td><td></td></tr>
<tr><td>9</td><td>Mature pole timber</td><td></td></tr>
<tr><td>10</td><td>Mature sawtimber</td><td></td></tr>
<tr><td>11</td><td>Immature pole timber</td><td></td></tr>
<tr><td>12</td><td>Immature sawtimber</td><td></td></tr>
<tr><td>13</td><td>Seedling and sapling</td><td></td></tr>
<tr><td>14</td><td>Adequately stocked seedlings and saplings</td><td></td></tr>
<tr><td>15</td><td>Inadequately stocked / nonstocked</td><td></td></tr>
<tr><td>16</td><td>Group selection management</td><td></td></tr>
<tr><td>17</td><td>Individual tree selection management</td><td></td></tr>
<tr><td>18</td><td>Two-aged management</td><td></td></tr>
</table></td></tr>
<tr><td>STAND_YEAR_OF_ORIGIN</td><td>N(4)</td><td>Calendar year the stand was planted or created. Use the mean age of the dominant and codominant trees in the stand to calculate the stand year of origin.</td></tr>
<tr><td>STATE</td><td>VC(2)</td><td>Alpha state code of the state where the setting is located.
For example: Use “CO” for Colorado.
Constrained by Nrv_states</td></tr>
<tr><td>STATE_PLANE_DATUM</td><td>VC(10)</td><td>Method of determination for latitude and longitude.</td></tr>
<tr><td>STATE_PLANE_X</td><td>N(12,3)</td><td>The X-coordinate of the State Plane grid.</td></tr>
<tr><td>STATE_PLANE_Y</td><td>N(12,3)</td><td>The Y-coordinate of the State Plane grid.</td></tr>
<tr><td>STATE_PLANE_ZONE</td><td>VC(10)</td><td>The zone in which the State Plane exists.</td></tr>
<tr><td>STEM_MAPPED_FLAG</td><td>VC(1)</td><td>Flag to indicate if the setting was stem mapped.
Y = Yes, the setting was stem mapped.</td></tr>
<tr><td>STOCKING_FLAG</td><td>VC(1)</td><td>Flag to indicate if the setting is currently stocked.
Y = Yes, the setting is stocked.</td></tr>
<tr><td>STOCKING_PERCENT</td><td>N(3)</td><td>The extent to which a given stand density meets a management objective, stored in percent. Valid values are 0-999</td></tr>
<tr><td>STRATUM</td><td>VC(6)</td><td>Current stratum definition of the setting.</td></tr>
<tr><td>STRATUM_EXPANSION_ FACTOR</td><td>N(9,1)</td><td>Value used to expand the sample information to an area basis. Stored in acres.</td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>STRUCTURE</td><td>VC(2)</td><td>Description of the distribution of tree size classes within the setting.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>SS</td><td>Single-story</td><td>CSE</td></tr><tr><td>TS</td><td>Two-storied</td><td>CSE</td></tr><tr><td>MS</td><td>Multi-storied</td><td>CSE</td></tr><tr><td>MO</td><td>Mosaic</td><td>CSE</td></tr><tr><td>UA</td><td>Unknown/un-assessable</td><td>CSE</td></tr></table></td></tr>
<tr><td>SUBCOMPARTMENT_NO</td><td>VC(10)</td><td>Subdivision of compartment.</td></tr>
<tr><td>SUBCYCLE_NUMBER</td><td>N(2)</td><td>FIADB Survey Table variable. Inventory subcycle number. For an annual inventory that takes n years to measure all plots, subcycle shows in which of the n years of the cycle the data were measured. Subcycle is 0 for a periodic inventory.</td></tr>
<tr><td>SUBCYCLE_PREVIOUS</td><td>N(2)</td><td>Previous inventory subcycle number. Identifies the most recent prior subcycle number.</td></tr>
<tr><td>SUBGROUP_CODE</td><td>VC(4)</td><td>Subgroup the plots within the setting into different conditions within a setting.</td></tr>
<tr><td>SUMMARY_MSN_FLAG</td><td>VC(1)</td><td>A flag to indicate whether or not the data set for this parent setting is suitable for use in the FSVeg summary process or for use in Most Similar Neighbor processing.
Y” = data is suitable
Null = data is not suitable or status unknown</td></tr>
<tr><td>SURVEY_UNIT</td><td>VC(2)</td><td>Forest Inventory and Analysis survey unit identification number. Survey units are usually groups of Counties within each State. This code is used primarily for reporting purposes.

For FIA data, Survey Unit Codes and Names are found in Appendix C of Miles, et. al. 2001. The forest inventory and analysis database: database description and users manual version 1.0. Gen. Tech. Rep. NC-218 St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station, 130 p.</td></tr>
</table>

NRV_SETTING_MEASUREMENTS (cont.)

Name	Size	Description
TOPOGRAPHIC_POSITION	VC(2)	PNW Regional variable. The topographic position for each subplot.

Code	Description	Use
0	Other – described in remarks	PNW
1	Ridge top or mountain peak over 130 feet	PNW
2	Narrow ridge top or peak less than 130 feet wide	PNW
3	Sidehill -- upper 1/3	PNW
4	Sidehill -- middle 1/3	PNW
5	Sidehill -- lower 1/3	PNW
6	Canyon bottom less than 660 feet wide	PNW
7	Bench, terrace or dry flat	PNW
8	Broad alluvial flat over 660 feet wide	PNW
9	Swamp or wet flat	PNW

TRANSECT_AZIMUTH	N(3)	The azimuth direction of the transect
UTM_DATUM	V(10)	Method of determination for recording UTM coordinates. FIA plots use the NAD83 datum.
UTM_EASTING	VC(6)	Easting, for the southwest corner of the UTM grid cell encompassing the setting. Stored in meters.
UTM_ERROR	N(5)	Stored in feet (+/-).
UTM_NORTHING	VC(7)	Northing, for the southwest corner of the UTM grid cell encompassing the setting. Stored in meters.
UTM_ZONE	N(2)	UTM zone
UTM_ZONE_DESIGNATOR	VC(1)	For FIA data, to designate which UTM zone is being used.
YEAR_SETTING_ID_CHANGED	N(4)	Calendar year the setting ID changed from the previous setting ID to the current setting ID. Must be greater than 1799.

NRV_SITE_INDEXES

This table describes site index information. Site index is an indicator of site quality expressed as the height of a tree at a specified index or base age. There can be multiple site index entries for each setting record – one entry per species. A record must already exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.

NRV_SITE_INDEXES (cont.)

Name	Size	Description
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
REFERENCE_NO ***Required***	VC(3)	Document from which the site index was obtained. This column is constrained by Nrv_site_index_ref_codes. Reference_no and site_species reference a record in that table. This record contains information on source, author, base age, species, and applicable geographic region of the site index equations or curves used to determine site index.
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
SITE_INDEX ***Required***	N(4,1)	Numeric indicator of site quality expressed as the total height attained by vigorous and free-growing trees of a specified species at a specified age (i.e. the base age).
SITE_SPECIES ***Required***	VC(8)	Scientific abbreviation of the site index species. This column is constrained by Nrv_site_index_ref_codes.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
MANAGEMENT_TYPE_FLAG	VC(1)	This is the site index for the R8 management type
MAPCOND_CN	VC(34	Foreign key to Nrv_mapped_conditions.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
PRIMARY_SITE_INDEX_FLAG	VC(1)	Flag to indicate if this site index is the primary site index for the setting when more than one site index record is entered for a setting. Y = yes, this is the primary site index
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
SITE_INDEX_METHOD	VC(2)	Method used to determine site index. **Code** / **Description** / **Use** E — Estimated C — Calculated (used Site index formulas based on measured tree data).

NRV_SUBSAMPLE_INFO

This table describes multiple fuels/cover transect protocols, e.g. PNW and P3 down woody debris and fuels protocol, and the PNW Ground Cover on NFS Lands (pg. 221-225) protocol.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
SELCRIT_CN ***Required***	VC(34)	Foreign key to Nrv_selection_criteria
SETMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_setting_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
DISTANCE_BEGINNING	N(6,3)	The beginning and ending distance refer to the distance along the transect line where the transect intersects the boundary with the adjacent condition class nearer to the subplot center and where the transect exits the condition class segment being delineated and intersects the boundary with a different condition class further away from the subplot center.
DISTANCE_ENDING	N(6,3)	The beginning and ending distance refer to the distance along the transect line where the transect intersects the boundary with the adjacent condition class nearer to the subplot center and where the transect exits the condition class segment being delineated and intersects the boundary with a different condition class further away from the subplot center.
DISTANCE_HORIZONTAL	N(6,3)	Horizontal distance measured between distance_beginning and distance_ending. If the sample design protocol specifies measurements in horizontal distances, this value will match distance_ending minus distance_beginning.
MAPCOND_CN	VC(34)	Foreign key to Nrv_fia_mapped_conditions
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
SLOPE_DISTANCE	N(6,3)	Distance measured along the slope between distance_beginning and distance_ending. If the sample design protocol specifies measurements in slope distances, this value will match distance_ending minus distance_beginning

NRV_SUBSAMPLE_INFO (cont.)

Name	Size	Description
SLOPE_PERCENT	N(3)	The percent of the slope along the transect
SUBSAMPLE_ID	VC(2)	Unique number identifying the subsample
TRAMPLING	N(3)	This variable is a P3 vegetation diversity and structure variable. Code 1: Low (0-10% of quadrant trampled) — Use: FIA Code 2: Moderate (10-50% of quadrant trampled) — Use: FIA Code 3: Heavy (>50% of quadrant trampled)

NRV_TREE_DISTURBANCES

This table describes the disturbance agent, severity, and location on a tree. There can be multiple tree disturbance records for each tree record. A record must already exist in Nrv_tree_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
TREMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_tree_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
AGENT_CODE	VC(3)	Disturbance agent code. Example: the southern pine beetle is code "003" under category 11, and the looper is code "003" under category 12. This column is constrained by Nrv_disturbance_agents.
CATEGORY_CODE	VC(2)	Disturbance category code. Example: root disease is category "21." This column is constrained by Nrv_disturbance_categories.
DATA_CODE_1	VC(10)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_1_DEFINITION	VC(50)	Define the value stored in data_code_1.

NRV_TREE_DISTURBANCES (cont.)

Name	Size	Description
DATA_CODE_2	VC(10)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_2_DEFINITION	VC(50)	Define the value stored in data_code_2.
DATA_CODE_3	VC(10)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_3_DEFINITION	VC(50)	Define the value stored in data_code_3.
DATE_ACCURACY	VC(5)	Record the accuracy of the value in measurement_date Code / Description / Use DAY / Valid to the nearest day / MONTH / Valid to the nearest month / YEAR / Valid to the nearest year / EST / Only an estimate /
DISTURBANCE_DATE	DATE	The date the tree was disturbed. If date is not known enter the year and/or month that is known.
EFFECT_CODE	VC(3)	The effect of damage on a tree. This column is constrained by Nrv_physical_effects.
EFFECT_SEVERITY	VC(3)	All effects have a severity from 1-100 indicating the percent of the setting affected by an effect, except for effect codes of 12 and 22, which only use a "1" (minor, affecting growth) or a "2" (severe, survivability) severity.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
SEVERITY_RATING_CODE	VC(6)	Severity of the disturbance to the tree. This column is constrained by Nrv_severity_ratings.
TREE_PART_CODE	VC(2)	Foreign key to Nrv_tree_part_codes

NRV_TREE_EXPANSION_FACTORS

This table contains columns containing tree volume, growth, removal, and mortality for use in stratum level estimates.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.

NRV_TREE_EXPANSION_FACTORS (cont.)

Name	Size	Description
CREATED_IN_INSTANCE ***Required***	N(6)	The database server ID where the record was created.
TREMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_tree_measurements.
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
BOLEHT	N(2)	Bole length (height). The length of a tree, recorded to a 4-inch top, where at least one 4-foot section is present.
CULLBF	N(3)	Board-foot cull. The proportion of the gross board-foot volume that is in cull due to rot or form.
CULLBFSND	N(3)	Board-foot-cull soundness. The proportion of the board-foot cull that is sound (due to form).
CULLCFSND	N(3)	Cubic-foot-cull soundness. The proportion of the cubic-foot cull that is sound (due to form).
CULLCF	N(3)	Cubic-foot cull. The proportion of the gross cubic-foot volume that is in cull due to rot or form.
CULLDEAD	N(3)	Dead cull. The proportion of the gross cubic-foot volume that is in dead cull.
CULLFLD	N(2)	Rotten/missing cull. The percent rotten or missing cubic-foot cull for all live tally trees > 5.0 in DBH/DRC (CORE) and all standing dead tally trees > 5.0 in DBH/DRC (CORE OPTIONAL). The percentage of rotten and missing cubic-foot volume, to the nearest 1 percent. When estimating volume loss (tree cull), only consider the cull on the merchantable bole/portion of the tree, from a 1-ft stump to a 4-inch top. Do not include any cull estimate above actual length. For western woodland species, the merchantable portion is between the point of DRC measurement to a 1.5-inch DOB top
CULLFORM	N(3)	Form cull. The proportion of the gross cubic-foot volume that is in form defect cull
CULLMSTOP	N(3)	Missing top cull. The proportion of the gross cubic-foot volume that is in cull due to a missing top.
CULLROUGH	N(2)	Rough cull. Percentage of sound dead cull, as a percent of the merchantable bole/portion of the tree. (CORE OPTIONAL)
DIACALC	N(5,2)	Current diameter (calculated), in inches. If the diameter is unmeasurable (i.e. the tree is cut or dead), the diameter is calculated. DIA for cut and dead trees presents problems associated with uncertainty of when the tree was cut or died as well as structural deterioration of dead trees. Consult individual units for explanations of how DIA is collected for dead and cut trees.
DRYBIOM	N(13,6)	Merchantable stem biomass oven-dry weight for live trees. The total gross biomass (including bark) of a tree 5.0 inches DBH or larger from a 1-foot stump to a minimum 4-inch tope DOB of the central stem.

NRV_TREE_EXPANSION_FACTORS (cont.)

Name	Size	Description
DRYBIOT	N(13,6)	Total gross biomass oven dry weight for live trees. The total aboveground biomass of a sample tree 1.0 inch diameter or larger, including all tops and limbs (but excluding foliage).
FGROWBFSL	N(11,6)	Net annual merchantable board-foot growth of a sawtimber tree on all forestland. This is the net change in board-foot volume per year of this tree (for remeasured plots $(V_2-V_1)/(t_2-t_1)$). Because this value is net growth, it may be a negative number. Negative growth values are usually due to mortality ($V_2=0$) but can also occur on live trees that have a net loss in volume because of damage, rot, or other causes. To expand to a per acre value, multiple by TPAGROW.
FGROWCFAL	N(11,6)	Net annual sound cubic-foot growth of a live tree on all forestland. The net change in cubic-foot volume per year of this tree (for remeasured plots $(V_2-V_1)/(t_2-t_1)$). Because this value is net growth, it may be a negative number. Negative growth values are usually due to mortality ($V_2=0$) but can also occur on live trees that have a net loss in volume because of damage, rot, or other causes. To expand to a per acre value, multiple by TPAGROW. GROWCFAL differs from GROWCFGS by the inclusion of form cull tree volume.
FGROWCFGS	N(11,6)	Net annual merchantable cubic-foot growth of a growing-stock tree on all forestland. This is the net change in cubic-foot volume per year of this tree (for remeasured plots, $(V_2-V_1)/(t_2-t_1)$; where 1 and 2 denote the past and current measurement, respectively, V is volume, and t indicates year of measurement). Because this value is net growth, it may be a negative number. Negative growth values are usually due to mortality ($V_2=0$) but can also occur on live trees that have a net loss in volume because of damage, rot, or other causes. To expand to a per acre value, multiple by TPAGROW.
FMORTBFSL	N(11,6)	Board-foot volume of a sawtimber tree for mortality purposes on all forestland. Represents the board-foot (International ¼-rule) volume of a sawtimber tree at time of mortality. To obtain estimates of annual per acre mortality, multiply by TPAMORT.
FMORTCFAL	N(11,6)	Sound cubic-foot volume of a tree for mortality purposes on all forestland. Represents the cubic-foot volume of the tree at time of mortality. To obtain estimates of annual per acre mortality, multiply by TPAMORT. MORTCFAL differs from MORTCFGS by the inclusion of form cull tree volume.
FMORTCFGS	N(11,6)	Cubic-foot volume of a growing-stock tree for mortality purposes on all forestland. Represents the cubic-foot volume of a growing-stock tree at time of mortality. To obtain estimates of annual per acre mortality, multiply by TPAMORT

NRV_TREE_EXPANSION_FACTORS (cont.)

Name	Size	Description
FREMVBFSL	N(11,6)	Board-foot volume of a sawtimber tree for removal purposes on all forestland. Represents the board-foot (International ¼-rule) volume of the tree at time of removal. To obtain estimates of annual per acre removals, multiply by TPAREMV
FREMVCFGS	N(11,6)	Cubic-foot volume of a growing-stock tree for removal purposes on all forestland. Represents the cubic-foot volume of the tree at time of removal. To obtain estimates of annual per acre removals, multiply by TPAREMV.
FREMCFAL	N(11,6)	Sound cubic-foot volume of the tree for removal purposes on all forestland. Represents the cubic-foot volume of the tree at time of removal. To obtain estimates of annual per acre removals, multiply by TPAREMV. REMVCFAL differs from REMVCFGS by the inclusion of cull tree volume.
GROWBFSL	N(13,6)	Net annual merchantable board-foot growth of sawtimber tree. This is the net change in board-foot volume per year of this tree (for re-measured plots (V2-V1)/t2-t1). Because this value is net growth, it may be a negative number.
GROWCFAL	N(13,6)	Net annual sound cubic-foot growth of live trees. The net change in cubic-foot volume per year of this tree (for re-measured plots (V2-V1)/t2-t1). Because this value is net growth, it may be a negative number. Negative growth values are usually due to mortality (V2=0) but can also occur on live trees that have a net loss in volume because of damage, rot, or other causes.
GROWCFGS	N(13,6)	Net annual merchantable cubic-foot growth of growing-stock tree. This is the net change in cubic-foot volume per year of this tree (for re-measured plots, (V2-V1)/(t2-t1); where 1 and 2 denote the past and current measurement, respectively, V is volume, and t indicates year of measurement). Because this value is net growth, it may be a negative number. Negative growth values are usually due to mortality (v2=0) but can also occur on live trees that have a net loss in volume because of damage, rot, or other causes.
HTCALC	N(3)	**Computed.** total length.
MODIFIED_BY	VC(30)	The name of the person who last modified the record.
MODIFIED_DATE	DATE	The date the record was last modified.
MODIFIED_IN_INSTANCE	N(6)	The database server ID where the record was last modified.
MORTBFSL	N(13,6)	Board-foot volume of a sawtimber tree for mortality purposes. Represents the board-foot (International 1/4-rule) volume of a sawtimber tree at time of mortality.
MORTCFAL	N(13,6)	Sound cubic-foot volume of a tree for mortality purposes. Represents the cubic-foot volume of the tree at time of mortality.
MORTCFGS	N(13,6)	Cubic-foot volume of a growing stock tree for mortality purposes. Represents the cubic-foot volume of a growing stock tree at time of mortality.

NRV_TREE_EXPANSION_FACTORS (cont.)

Name	Size	Description
REMVBFSL	N(13,6)	Board-foot volume of a sawtimber tree for removal purposes. Represents the board-foot (International 1/4-rule) volume of the tree at time of removal.
REMVCFAL	N(13,6)	Sound cubic-foot volume of the tree for removal purposes. Represents the cubic-foot volume of the tree at time of removal.
REMVCFGS	N(11,6)	Cubic-foot volume of a growing stock tree for removal purposes. Represents the cubic-foot volume of the tree at time of removal.
SAWHT	N(2)	Sawlog length (height). The length of a tree, recorded to a 7" top (9" for hardwoods), where at least one 8 foot log, merchantable or not, is present. On broken-off trees, sawlog length is recorded to the point of the break.
TPACURR	N(13,6)	Trees per acre. Current number of trees per acre that the tree represents for calculating number of trees on forestland.
TPAGROW	N(13,6)	Growth trees per acre. Number of trees per acre that the tree represents for calculating growth on forestland.
TPAMORT	N(13,6)	Mortality trees per acre per year. Number of trees per acre per year that the tree represents for calculating mortality on forestland.
TPAREMV	N(13,6)	Removals trees per acre per year. Number of trees per acre per year that the tree represents for calculating removals from forestland.
VOLBFGRS	N(13,6)	Gross board-foot volume in the saw-log portion. This is the net volume of wood in the central stem of a sample commercial species tree of sawtimber size (9.0 inches DBH minimum for softwoods, 11.0 inches DBH minimum for hardwoods), from a 1-foot stump to a minimum top DOB, (7.0 inches for softwoods, 9.0 inches for hardwoods) or to where the central stem breaks into limbs, all of which are less than the minimum top DOB. Volume is based on International ¼-inch rule. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4.
VOLBFNET	N(13,6)	Net board-foot volume in the saw-log portion. This is the net volume of wood in the central stem of a sample commercial species tree of sawtimber size (9.0 inches DBH minimum for softwoods, 11.0 inches DBH minimum for hardwoods), from a 1-foot stump to a minimum top DOB, (7.0 inches for softwoods, 9.0 inches for hardwoods) or to where the central stem breaks into limbs, all of which are less than the minimum top DOB. Volume is based on International ¼-inch rule.

NRV_TREE_EXPANSION_FACTORS (cont.)

Name	Size	Description
VOLCFGRS	N(13,6)	Gross cubic-foot volume. The total volume of wood in the central stem of a sample tree 5.0 inches in diameter or larger, from a 1-foot stump to a minimum 4-inch top DOB, or to where the central stem breaks into limbs all of which are less than 4.0 inches DOB. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4.
VOLCFNET	N(13,6)	Net cubic-foot volume. The net volume of wood in the central stem of a sample tree 5.0 inches diameter or larger, from a 1-foot stump to a minimum 4-inch top DOB, or to where the central stem breaks into limbs all of which are less than 4.0 inches DOB.
VOLCFSND	N(13,6)	Sound cubic-foot volume. The volume of sound wood in the central stem of a sample tree 5.0 inches diameter or larger from a 1-foot stump to a minimum 4-inch top DOB or to where the central stem breaks into limbs all of which are less than 4.0 inches DOB. Form cull, but not rotten cull is included.
VOLCSGRS	N(13,6)	Gross cubic-foot volume in the saw-log portion. This is the net volume of wood in the central stem of a sample commercial species tree of sawtimber size (9.0 inches DBH minimum for softwoods, 11.0 inches DBH minimum for hardwoods), from a 1-foot stump to a minimum top DOB, (7.0 inches for softwoods, 9.0 inches for hardwoods) or to where the central stem breaks into limbs, all of which are less than the minimum top DOB.
VOLCSNET	N(13,6)	Net cubic-foot volume in the saw-log portion. The net volume of wood in the central stem of a sample commercial species tree of sawtimber size (9.0 inches DBH minimum for softwoods, 11.0 inches DBH minimum for hardwoods), from a 1-foot stump to a minimum top DOB, (7.0 inches for softwoods, 9.0 inches for hardwoods) or to where the central stem breaks into limbs, all of which are less than the minimum top DOB.

NRV_TREE_MEASUREMENTS

This table describes each tree. There can be multiple tree measurement records for each setting. A record must already exist in Nrv_setting_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CREATED_DATE
Required</td><td>DATE</td><td>The date the record was created.</td></tr>
<tr><td>CREATED_IN_INSTANCE
Required</td><td>N(6)</td><td>The database ID where the record was created.</td></tr>
<tr><td>SETMEAS_CN
Required</td><td>VC(34)</td><td>Foreign key to Nrv_setting_measurements</td></tr>
<tr><td>VPDUNIT_ID
Required</td><td>VC(10)</td><td>Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.</td></tr>
<tr><td>AGE</td><td>N(4)</td><td>Tree age at time of measurement. Stored in years.</td></tr>
<tr><td>AGE_METHOD</td><td>VC(2)</td><td>Method use to determine the tree age.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>DM</td><td>Age at DBH, measured</td><td>CSE</td></tr>
<tr><td>DE</td><td>Age at DBH, estimated</td><td></td></tr>
<tr><td>DC</td><td>Age at DBH, calculated</td><td></td></tr>
<tr><td>TM</td><td>Total age, measured</td><td>CSE</td></tr>
<tr><td>TE</td><td>Total age, estimated</td><td></td></tr>
<tr><td>TC</td><td>Total age, calculated</td><td></td></tr>
</table>

-Age at DBH is the number of years at 4.5 feet above the forest floor on the uphill side of the tree.
-Total age is the age from germination to present. An example of measured total age is boring the plant or destructive sampling at the root collar. An example of estimated total age is measuring the age at DBH and adding an estimate of the number of years it took to reach breast height and adding that to the age at DBH.
-Whorl counts can be measured by physically counting whorls, or estimated.</td></tr>
<tr><td>AZIMUTH</td><td>N(3)</td><td>Direction, from the North, to the tree as measured from center of plot to each tree. Stored in degrees.</td></tr>
<tr><td>BARE_TOP_PERCENT</td><td>N(3)</td><td>Total tree height barren of foliage, but not necessarily dead. Measured on trees suffering defoliation from insects, disease, etc. Stored in percent.</td></tr>
<tr><td>BASAL_AREA_EQUIV</td><td>N(8,4)</td><td>The square feet of basal area per acre represented by this tree record for the lowest-level sample element (i.e. plot, subplot, etc.) on which it was measured. Note: This value represents the expansion factor for the record. If this record represents multiple trees, this value is their total square feet of basal area per acre.
basal_area_equivalent = 0.005454*diameter^2 *tpa_equiv</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CONE_SEROTINY</td><td>VC(2)</td><td>The open or closed condition of the majority of a tree's viable cones. Measured on lodgepole pine and jack pine, 5.0 inches DBH and larger only. Trees are considered to have closed cones (serotinous) if more than 50 % of the cones are closed.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>0</td><td>No cones</td><td>CSE</td></tr>
<tr><td>1</td><td>Open/opening</td><td>CSE</td></tr>
<tr><td>2</td><td>Closed cones</td><td>CSE</td></tr>
<tr><td>3</td><td>Intermediate (both open and closed cones)</td><td>CSE</td></tr>
</table>
</td></tr>
<tr><td>CROWN_BASE_HEIGHT</td><td>N(6,3)</td><td>Vertical distance from the ground to the base of the live crown (Curtis 1983). Sometimes called height to crown. Stored in feet.</td></tr>
<tr><td>CROWN_BASE_HEIGHT_ DEFINITION</td><td>VC(2)</td><td>Description of the type of crown base height measurement:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>C</td><td>Compacted crown</td><td></td></tr>
<tr><td>U</td><td>Uncompacted crown</td><td>CSE</td></tr>
<tr><td>L</td><td>Lowest limb</td><td></td></tr>
</table>
</td></tr>
<tr><td>CROWN_BASE_HEIGHT_ METHOD</td><td>VC(2)</td><td>Method used to measure the height of live crown:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>M</td><td>Measured</td><td>CSE</td></tr>
<tr><td>E</td><td>Estimated</td><td></td></tr>
<tr><td>C</td><td>Calculated</td><td></td></tr>
</table>
</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CROWN_CLASS</td><td>VC(2)</td><td>Relative position of the tree with respect to other trees or competing vegetation. Crown class for each tree is judged in the context of its immediate environment; that is, those trees which are competing for sunlight with the subject tree. This is a useful descriptor of the competitive status of trees in all structural types of stands, although crown classes were originally conceived to classify trees in even-aged or storied stands.
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>OP</td><td>Open grown, crown receives optimal sunlight above and sides.</td><td>CSE</td></tr>
<tr><td>DO</td><td>Dominant, full sunlight from above and partly from sides.</td><td>CSE</td></tr>
<tr><td>CO</td><td>Codominant, full sunlight from above, but little from sides.</td><td>CSE</td></tr>
<tr><td>IN</td><td>Intermediate, sunlight only from holes in canopy</td><td>CSE</td></tr>
<tr><td>OV</td><td>Overtopped</td><td>CSE</td></tr>
<tr><td>RE</td><td>Remnant</td><td>CSE</td></tr>
<tr><td>AB</td><td>Leader above brush</td><td>CSE</td></tr>
<tr><td>IB</td><td>Leader within brush</td><td>CSE</td></tr>
<tr><td>UB</td><td>Leader overtopped by brush</td><td>CSE</td></tr>
<tr><td>SU</td><td>Suppressed, no sunlight, below canopy in even-aged stands.</td><td></td></tr>
<tr><td>UN</td><td>Understory</td><td></td></tr>
</table></td></tr>
<tr><td>CROWN_LENGTH</td><td>N(6,3)</td><td>Vertical distance from the top leader of the tree to the base of the crown, measured to the lowest live branch-whorl with live branches in at least 3 quadrants, and continuous with the main crown. Stored in feet.</td></tr>
<tr><td>CROWN_LENGTH_DEFINITION</td><td>VC(2)</td><td>Description of the type of crown length:
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>C</td><td>Compacted crown</td><td></td></tr>
<tr><td>U</td><td>Uncompacted crown</td><td></td></tr>
<tr><td>L</td><td>Lowest limb</td><td></td></tr>
</table></td></tr>
<tr><td>CROWN_LENGTH_METHOD</td><td>VC(2)</td><td>Method used in measuring crown length:
<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>M</td><td>Measured</td><td></td></tr>
<tr><td>E</td><td>Estimated</td><td></td></tr>
<tr><td>C</td><td>Calculated</td><td></td></tr>
</table></td></tr>
<tr><td>CROWN_LOCAL</td><td>N(6,3)</td><td>Locally defined crown measurement.</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>CROWN_LOCAL_DEFINITION</td><td>VC(2)</td><td>Description of the type of local crown measurement:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>CR</td><td>Compacted, ratio</td><td></td></tr><tr><td>UR</td><td>Uncompacted, ratio</td><td></td></tr><tr><td>LR</td><td>Lowest limb, ratio</td><td></td></tr><tr><td>CL</td><td>Compacted, length</td><td></td></tr><tr><td>UL</td><td>Uncompacted, length</td><td></td></tr><tr><td>LL</td><td>Lowest limb, length</td><td></td></tr><tr><td>CB</td><td>Compacted, base height</td><td></td></tr><tr><td>UB</td><td>Uncompacted, base height</td><td></td></tr><tr><td>LB</td><td>Lowest limb, base height</td><td></td></tr></table></td></tr>
<tr><td>CROWN_LOCAL_METHOD</td><td>VC(2)</td><td>Method used in the crown_local measurement:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td></td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>CROWN_RATIO</td><td>N(3)</td><td>Amount of the tree bole supporting green, live, healthy foliage when compared to the total length or height. For compacted crown ratios, openings in the crown or lopsided crowns are visually adjusted by visually transferring lower branches to fill in the holes. Crowns are not compacted to form unnaturally dense crowns. Stored in percent.</td></tr>
<tr><td>CROWN_RATIO_DEFINITION</td><td>VC(2)</td><td>Description of the type of crown ratio:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>C</td><td>Compacted crown</td><td></td></tr><tr><td>U</td><td>Uncompacted crown</td><td>CSE</td></tr><tr><td>L</td><td>Lowest limb</td><td></td></tr></table></td></tr>
<tr><td>CROWN_RATIO_METHOD</td><td>VC(2)</td><td>Method used in measuring crown ratio:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td></td></tr><tr><td>E</td><td>Estimated</td><td>CSE</td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

Name	Size	Description
CROWN_WIDTH	N(5,2)	Either the maximum or average of the maximum and minimum crown width of a tree. The maximum crown width is measured through the center of the tree (or geographic center if multi-stemmed). The minimum crown width is measured at a right angle to the maximum crown width. Stored in feet.
CROWN_WIDTH_METHOD	VC(2)	Method used in measuring crown width. Code / Description / Use: MA – Measured, average EA – Estimated, average – CSE CA – Calculated, average MM – Measured, maximum EM – Estimated, maximum CM – Calculated, maximum
DATA_CODE_1	VC(10)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_1_DEFINITION	VC(160)	Define the value in data_code_1.
DATA_CODE_2	VC(10)	Used to record alphanumeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_CODE_2_DEFINITION	VC(160)	Define the value stored in data_code_2.
DATA_NUM_1	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_1_DEFINITION	VC(160)	Define the value stored in data_num_1.
DATA_NUM_2	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_2_DEFINITION	VC(160)	Define the value stored in data_num_2.
DATA_NUM_3	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_3_DEFINITION	VC(160)	Define the value stored in data_num_3.
DATA_NUM_4	N(7,2)	Used to record numeric information specific to a particular Region or sample protocol. This information is not a nationally recognized data element.
DATA_NUM_4_DEFINITION	VC(160)	Define the value stored in data_num_4.
DEADWOOD_PERCENT	N(3)	Amount of deadwood in the tree canopy. Stored in percent.
DIAMETER	N(6,3)	Cross sectional width of a plant measured through the center of the stem. Stored in inches.

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>DIAMETER_HEIGHT</td><td>N(6,3)</td><td>Height above ground where the diameter was measured. 4.5 feet implies a DBH (diameter breast height) measurement. 0 implies a DRC (diameter at root collar) measurement. Stored in feet.</td></tr>
<tr><td>DIAMETER_METHOD</td><td>VC(2)</td><td>Method used to measure tree diameter:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td>CSE</td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>DISTANCE</td><td>N(6,3)</td><td>Distance from center of plot to the sample tree. Stored in feet.</td></tr>
<tr><td>DISTANCE_METHOD</td><td>VC(2)</td><td>Method used to measure distance from the plot center to the tree:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>C</td><td>Plot center to tree center, horizontal distance</td><td></td></tr><tr><td>UC</td><td>Plot center to tree center, uncorrected slope distance</td><td></td></tr><tr><td>F</td><td>Plot center to tree face, horizontal distance</td><td></td></tr><tr><td>UF</td><td>Plot center to tree face, uncorrected slope distance</td><td></td></tr></table></td></tr>
<tr><td>DOWN_FLAG</td><td>VC(1)</td><td>Flag to indicate that a tree is on the ground:

Y = yes, the tree is down, not freestanding</td></tr>
<tr><td>FIRST_TREATMENT_OPTION</td><td>VC(2)</td><td>Silvicultural treatment option. Valid codes are 1-9.

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>This tree is to be cut.</td><td>CSE</td></tr><tr><td>2</td><td></td><td>CSE</td></tr><tr><td>3</td><td></td><td>CSE</td></tr><tr><td>4</td><td></td><td>CSE</td></tr><tr><td>5</td><td></td><td>CSE</td></tr><tr><td>6</td><td></td><td>CSE</td></tr><tr><td>7</td><td></td><td>CSE</td></tr><tr><td>8</td><td></td><td>CSE</td></tr><tr><td>9</td><td></td><td>CSE</td></tr></table></td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>GROWTH_FORM</td><td>VC(2)</td><td>Plant growth form code:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>EB</td><td>Evergreen broadleaf</td><td></td></tr><tr><td>EN</td><td>Evergreen needle leaved</td><td></td></tr><tr><td>EV</td><td>Evergreen</td><td></td></tr><tr><td>DE</td><td>Deciduous</td><td></td></tr><tr><td>DB</td><td>Deciduous broadleaf</td><td></td></tr><tr><td>DN</td><td>Deciduous needle leaved</td><td></td></tr></table></td></tr>
<tr><td>GROWTH_SAMPLE_TREE_FLAG</td><td>VC(1)</td><td>Flag to indicate if a tree is a growth sample tree.

Y = Yes, the tree is a growth sample tree.</td></tr>
<tr><td>HEIGHT</td><td>N(7,4)</td><td>Total span of a plant from ground level along bole to tip of tree (tree length, bole length). Stored in feet.</td></tr>
<tr><td>HEIGHT_GROWTH</td><td>N(7,4)</td><td>Increase in height over a specified time period. Stored in feet.</td></tr>
<tr><td>HEIGHT_GROWTH_METHOD</td><td>VC(2)</td><td>Method used in measuring height growth:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td>CSE</td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>HEIGHT_MERCHANTABLE</td><td>N(5,2)</td><td>The height, where no physical log, whether or not merchantable, can be produced because of excessive limbs, forks, or crooks.</td></tr>
<tr><td>HEIGHT_METHOD</td><td>VC(7)</td><td>Method used to measure total height:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td>CSE</td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>HEIGHT_TO_BREAK</td><td>N(7,4)</td><td></td></tr>
<tr><td>HEIGHT_TO_BREAK_METHOD</td><td>VC(2)</td><td>Method used to measure height to break:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td></td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>HEIGHT_TOPKILL</td><td>N(7,4)</td><td>Height from the ground to the point of stem breakage or topkill. Stored in feet.</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>HEIGHT_TOPKILL_METHOD</td><td>VC(2)</td><td>Method used to measure height topkill:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>M</td><td>Measured</td><td></td></tr><tr><td>E</td><td>Estimated</td><td></td></tr><tr><td>C</td><td>Calculated</td><td></td></tr></table></td></tr>
<tr><td>INDUSTRIAL_FLAG</td><td>VC(1)</td><td>Flag to indicate if a tree is classified as industrial or non-industrial. An industrial tree can be harvested, marketed, and utilized as a forest product:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>Y</td><td>Yes, the tree is industrial or commercial</td><td></td></tr><tr><td>N</td><td>No, the tree is non-industrial, or non-commercial</td><td></td></tr></table></td></tr>
<tr><td>LEAN_ANGLE</td><td>N(2)</td><td>Amount from vertical the bole is leaning (vertical = 0 degrees). Measured in degrees.</td></tr>
<tr><td>LIFEFORM_CODE</td><td>VC(2)</td><td>The life form classification of the tree. This column is constrained by Nrv_lifeform_classes.</td></tr>
<tr><td>LIVE_DEAD</td><td>VC(1)</td><td>Indicates whether a tree is alive or dead:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>L</td><td>Live tree</td><td>CSE</td></tr><tr><td>D</td><td>Dead tree</td><td>CSE</td></tr></table></td></tr>
<tr><td>LOG_DECAY_CLASS</td><td>VC(2)</td><td>Current condition of a down, dead tree:

<table><tr><th>Code</th><th>Description</th><th>Use</th></tr><tr><td>1</td><td>Bark intact, bole twigs, round, recently fallen "green"</td><td>CSE</td></tr><tr><td>2</td><td>Bark intact, twigs absent, soft texture, round, branches</td><td>CSE</td></tr><tr><td>3</td><td>Trace of bark, twigs gone, round, log near ground, no branches</td><td>CSE</td></tr><tr><td>4</td><td>Bark absent, twigs and branches gone, blocky texture, oval shape</td><td>CSE</td></tr><tr><td>5</td><td>No bark or twigs, soft powdery texture, oval shape</td><td>CSE</td></tr></table></td></tr>
<tr><td>MAPCOND_CN</td><td>VC(34)</td><td>Foreign key to Nrv_fia_mapped_conditions.</td></tr>
<tr><td>MODIFIED_BY</td><td>VC(30)</td><td>The name of the person who modified the record.</td></tr>
<tr><td>MODIFIED_DATE</td><td>DATE</td><td>The date the record was modified.</td></tr>
<tr><td>MODIFIED_IN_INSTANCE</td><td>N(6)</td><td>The database ID where the record was modified.</td></tr>
<tr><td>NO_OF_STEMS</td><td>N(3)</td><td>Number of stems that comprise the individual plant.</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>OFF_PLOT_FLAG</td><td>VC(1)</td><td>Flag to indicate if a tree is located off a plot. Trees located off the plot are not statistically related to those located on the plot.

Y = Yes, the tree is located off the plot.</td></tr>
<tr><td>PHYSICAL_TAG_FLAG</td><td>VC(1)</td><td>Flag to indicate if the tag_id is a physical tag attached to the tree.

Y = Yes, the tag is physically attached to the tree.</td></tr>
<tr><td>PREVIOUS_TAG_ID</td><td>VC(5)</td><td>If an original physical tag was lost, and the tree was re-tagged, this field stores the previous tag_id value; the value contained in tag_id field will then be considered the current tree tag_id.</td></tr>
<tr><td>PRIMARY_RECORD_FLAG</td><td>VC(1)</td><td>Flag to indicate if this is the primary tree measurement record. This flag is used when there are multiple records in this table for the same tree at the same point in time.

Y = Yes, this is the primary tree record. Another record exists in this table for this tree measurement</td></tr>
<tr><td>RADIAL_GROWTH</td><td>N(7,4)</td><td>Increase in the inside bark tree radius, over a period of time at the point where the diameter is measured. Stored in 20ths of inches.</td></tr>
<tr><td>RADIAL_GROWTH_2</td><td>N(7,4)</td><td>Increase in inside bark tree radius; over a period of time, at the point diameter is measured. Stored in 20ths of inches.</td></tr>
<tr><td>RADIAL_GROWTH_METHOD</td><td>VC(2)</td><td>Method used to measure radial_growth:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>M</td><td>Measured</td><td>CSE</td></tr>
<tr><td>E</td><td>Estimated</td><td></td></tr>
<tr><td>C</td><td>Calculated</td><td></td></tr>
</table>
</td></tr>
<tr><td>RADIAL_GROWTH_METHOD_2</td><td>VC(2)</td><td>Method used to measure radial_growth_2:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>M</td><td>Measured</td><td>CSE</td></tr>
<tr><td>E</td><td>Estimated</td><td></td></tr>
<tr><td>C</td><td>Calculated</td><td></td></tr>
</table>
</td></tr>
<tr><td>RECENT_MORTALITY_FLAG</td><td>VC(1)</td><td>Flag to indicate if a tree has died “recently,” or within the time frame specified in recent_mortality_years.

Y = Yes, the tree has died within the specified time frame.</td></tr>
<tr><td>RECENT_MORTALITY_YEARS</td><td>N(2)</td><td>Not currently used. The maximum amount of time a tree has been dead and can still be flagged as “recent” mortality in recent_mortality_flag. Stored in years. This column is a duplicate of the column in setting_measurements and will be dropped in future revisions of the database).</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>RECONCILIATION_CODE</td><td>VC(2)</td><td>Reason why a tree was not measured in the current or previous measurements:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>SP</td><td>New sprout</td><td></td></tr>
<tr><td>GE</td><td>New germinant</td><td></td></tr>
<tr><td>IG</td><td>Ingrowth tree (a tree previously measured in a separate design group that has passed a minimum threshold for a new design group)</td><td></td></tr>
<tr><td>ID</td><td>Ingrowth tree due to a design change</td><td></td></tr>
<tr><td>OG</td><td>Ongrowth tree (a tree was not previously measured but is now measured because it meets a minimum threshold)</td><td></td></tr>
<tr><td>OD</td><td>Ongrowth tree due to a design change</td><td></td></tr>
<tr><td>MI</td><td>Missed tree (should have been measured before but was inadvertently missed)</td><td></td></tr>
<tr><td>MA</td><td>In at both times</td><td></td></tr>
<tr><td>EX</td><td>Extra tree, should not have been measured before</td><td></td></tr>
<tr><td>GO</td><td>Gone</td><td></td></tr>
</table></td></tr>
<tr><td>REMARKS</td><td>VC(255)</td><td>Remarks relevant to the tree.</td></tr>
<tr><td>REMOVAL_CODE</td><td>VC(3)</td><td>Action that resulted in a tree being removed.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>100</td><td>Tree has been removed. Cause of removal stored in Nrv_tree_disturbances, if known.</td><td>FIA</td></tr>
</table></td></tr>
<tr><td>REMOVAL_DATE</td><td>DATE</td><td>Date, if known, the tree was removed. If actual date is not known enter the year and/or month.</td></tr>
<tr><td>REMOVAL_DATE_ACCURACY</td><td>VC(5)</td><td>Accuracy of the removal date.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>DAY</td><td>Valid to the nearest day</td><td>All</td></tr>
<tr><td>MONTH</td><td>Valid to the nearest month</td><td>All</td></tr>
<tr><td>YEAR</td><td>Valid to the nearest year</td><td>All</td></tr>
<tr><td>EST</td><td>Only an estimate</td><td>All</td></tr>
</table></td></tr>
<tr><td>ROW_ACCESS_CODE</td><td>VC(6)</td><td>Control field to support row level access.</td></tr>
<tr><td>SECOND_TREATMENT_OPTION</td><td>VC(2)</td><td>Possible silvicultural treatment option. Valid codes are 1-9. Example: (1 = leave tree; 2 = cut tree.) The meaning of each code is locally defined.</td></tr>
<tr><td>SELCRIT_CN</td><td>VC(34)</td><td>Foreign key to Nrv_selection_criteria</td></tr>
<tr><td>SITE_TREE_FLAG</td><td>VC(1)</td><td>Flag to indicate if a tree is a site tree:
Y = Yes, the tree is a site tree.</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>SNAG_DECAY_CLASS</td><td>VC(2)</td><td>Evaluation of the current condition of a standing dead tree:

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>1</td><td>All limbs, pointed top, 100% bark, intact sapwood, height intact.</td><td>CSE</td></tr>
<tr><td>2</td><td>Few limbs, top may be broken, some bark and height loss, sapwood decay.</td><td>CSE</td></tr>
<tr><td>3</td><td>Limb stubs, broken bole, bark, and sapwood sloughed, broken top.</td><td>CSE</td></tr>
<tr><td>4</td><td>Few stubs, bole broken/rotten, 50% bark, sapwood sloughed.</td><td>CSE</td></tr>
<tr><td>5</td><td>No stubs, broken and rotten bole, 20% bark, sapwood gone, rotten 50%.</td><td>CSE</td></tr>
</table>
</td></tr>
<tr><td>SPECIES_SYMBOL</td><td>VC(8)</td><td>The NRCS PLANTS code of the species represented by this record. For example, PSME = Pseudotsuga menziesii. Constrained by the appropriate TAXA table.</td></tr>
<tr><td>SUBGROUP_CODE</td><td>VC(4)</td><td>Categorize the trees into different groups within a stand.</td></tr>
<tr><td>SUBSAMPLE</td><td>VC(2)</td><td>Subsample code.</td></tr>
<tr><td>TAG_ID</td><td>VC(5)</td><td>Unique number physically attached to a tree or assigned to a tree record.</td></tr>
<tr><td>TOPKILL_PERCENT</td><td>N(3)</td><td>Amount of the total tree height that is topkill (including broken or missing top). Stored in percent.</td></tr>
<tr><td>TPA_EQUIV</td><td>N(10,5)</td><td>The number of trees per acre represented by this tree record for the lowest-level sample element (i.e., plot, subplot, etc.) on which it was measured. A calculated value. Note if a tree record represents multiple trees, this value represents the expansion factor for the record, not for an individual tree on the record.</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

<table>
<tr><th>Name</th><th>Size</th><th>Description</th></tr>
<tr><td>TREE_CLASS</td><td>VC(2)</td><td>The class of an individual tree.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>AC</td><td>Acceptable crop tree</td><td>CSE, Legacy</td></tr>
<tr><td>DE</td><td>Desirable crop tree</td><td>CSE, Legacy</td></tr>
<tr><td>GS</td><td>Growing stock</td><td>CSE, Legacy</td></tr>
<tr><td>RF</td><td>Rough tree</td><td>CSE, Legacy</td></tr>
<tr><td>RN</td><td>Rotten tree</td><td>CSE, Legacy</td></tr>
<tr><td>SV</td><td>Salvable tree (hard)</td><td>CSE, Legacy</td></tr>
<tr><td>UA</td><td>Unacceptable crop tree</td><td>CSE, Legacy</td></tr>
<tr><td>US</td><td>Unsalvable tree (soft)</td><td>CSE, Legacy</td></tr>
<tr><td>LG</td><td>Log</td><td>Legacy</td></tr>
<tr><td>WS</td><td>Woodland species</td><td>Legacy</td></tr>
<tr><td>H</td><td>Healthy</td><td>Firemon</td></tr>
<tr><td>U</td><td>Unhealthy</td><td>Firemon</td></tr>
<tr><td>S</td><td>Sick</td><td>Firemon</td></tr>
<tr><td>D</td><td>Dead</td><td>Firemon</td></tr>
</table>
</td></tr>
<tr><td>TREE_COUNT</td><td>N(4)</td><td>Count of like individuals (e.g. same species and size class) that this record represents. Used when a single record represents more than one measured tree (e.g. seedlings).</td></tr>
<tr><td>TREE_GRADE</td><td>N(2)</td><td>Used by eastern FIA units and is not available in the West. This value is nonzero for all sawtimber-size trees regardless of status, however it is not measured on all sawtimber-size trees on every plot. Sawtimber-size trees that are graded but do not contain a gradable log are given a tree grade 5. Sawtimber-size trees that are not graded because of sampling design have a tree grade of -1. Trees smaller than sawtimber receive a tree grade of zero. Valid values are 0-5, and –1.</td></tr>
<tr><td>TREE_STATUS</td><td>VC(1)</td><td>The status of an individual tree.

<table>
<tr><th>Code</th><th>Description</th><th>Use</th></tr>
<tr><td>L</td><td>Live</td><td>CSE</td></tr>
<tr><td>S</td><td>Stump</td><td>CSE</td></tr>
<tr><td>Y</td><td>Down live</td><td>CSE</td></tr>
<tr><td>D</td><td>Dead</td><td>CSE</td></tr>
<tr><td>X</td><td>Down dead</td><td>CSE</td></tr>
</table>
</td></tr>
</table>

NRV_TREE_MEASUREMENTS (cont.)

Name	Size	Description
TREE_USAGE	VC(2)	Use of a tree by wildlife. "Cavity" refers only to those made by wildlife (denning, resting, feeding, etc.). Code / Description / Use: SC – Cavity < 3 inches in diameter – CSE LC – Cavity > 3 inches in diameter – CSE LB – Loose bark – CSE FH – Foraging holes/flaked bark – CSE NE – Nest in tree – CSE AC – Animal created cavity IB – Indiana Bat Habitat tree – CSE
UNIQUE_NO	N(5)	Unique number identifying a tree for FVS processing. This number is generated the first time the tree is entered, and will not change over the course of re-measurements.
X_COORDINATE	N(7,2)	X-coordinate of this tree relative to a user-defined origin. Used for rectangular or square plots.
Y_COORDINATE	N(7,2)	Y-coordinate of this tree relative to a user-defined origin. Used for rectangular or square plots.
YEAR_OF_DEATH	N(4)	Estimated year the tree died. Year must be greater than 1799.
YEAR_OF_ORIGIN	N(4)	Year the tree became established by germination or sprouting (estimate based on local knowledge). Determined from the current total age of the tree.
YEAR_TAG_REPLACED	N(4)	Year the current tag_id replaced the previous tag_id. Year must be greater than 1799.

NRV_TREE_VOLUMES

This table describes tree volumes calculated from an outside volume estimator. There can be multiple tree volume records for each tree measurement record. A record must already exist in Nrv_tree_measurements before entering a record in this table.

Name	Size	Description
CN ***Required***	VC(34)	A system generated sequence number to uniquely identify a row of data in this table.
CREATED_BY ***Required***	VC(30)	The name of the person who created the record.
CREATED_DATE ***Required***	DATE	The date the record was created.
CREATED_IN_INSTANCE ***Required***	N(6)	The database ID where the record was created.
TREMEAS_CN ***Required***	VC(34)	Foreign key to Nrv_tree_measurements.

NRV_TREE_VOLUMES (cont.)

Name	Size	Description
VPDUNIT_ID ***Required***	VC(10)	Code which lets a user access specific data in the database. In most cases this is the Region and Forest number which allows the user to only access and manipulate that Region's and Forest's data.
BIOMASS	N(10,2)	Total gross mass of a tree for fire fuel modeling. Stored in pounds.
BIOMASS_VOL_REF	VC(10)	Volume equation used to calculate the Biomass.
CARBON_AG	N(13,6)	Carbon in the aboveground portion of the tree. The carbon mass (pounds) in the aboveground portion, excluding foliage, of live trees with a diameter of 1 inch or larger, and dead trees with a diameter of 5 inches or larger. Calculated for both timber and woodland species. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. Carbon is assumed to be one-half the value of biomass and is derived by summing the aboveground biomass estimates and multiplying by 0.5 as follows: CARBON_AG = 0.5 * (DRYBIO_BOLE + DRYBIO_STUMP + DRYBIO_TOP + DRYBIO_SAPLING + DRYBIO_WDLD_SPP)
CARBON_BG	N(13,6)	Carbon in the belowground portion of the tree. The carbon mass (pounds) of coarse roots that are greater than 0.1 inch in root diameter. Calculated for live trees with a diameter of 1 inch or larger, and dead trees with a diameter of 5 inches or larger. Calculated for both timber and woodland species. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. Carbon is assumed to be one-half the value of belowground biomass as follows: CARBON_BG = 0.5 * DRYBIO_BG
CUBIC_VOL_GROWTH	N(6,2)	Volume growth of a tree in cubic feet.
CUBIC_VOL_GROWTH_REF	VC(10)	Volume equation used to calculate cubic_vol_growth.
DRYBIO_BG	N(13,6)	Dry biomass of the roots. The ovendry biomass (pounds) of the belowground portion of a tree, includes coarse roots with a root diameter greater than or equal to 0.1 inch. Calculated on live and dead trees for both timber and woodland species with a diameter of 1 inch or larger. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. Appendix J contains equations used to estimate biomass components in the FIADB.

NRV_TREE_VOLUMES (cont.)

Name	Size	Description
DRYBIO_BOLE	N(13,6)	Dry biomass in the merchantable bole. The ovendry biomass (pounds) in the merchantable bole of timber species [trees where diameter is measured at breast height (DBH)] greater than or equal to 5 inches in diameter. This is the biomass of sound wood in live and dead trees, including bark, from a 1-foot stump to a minimum 4-inch top DOB of the central stem. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. This attribute is blank (null) for timber species with DIA < 5.0 inches and for woodland species. See DRYBIO_WDLD_SPP for biomass of woodland species and DRYBIO_SAPLING for biomass of trees with DIA < 5 inches. For dead or cut timber trees, this number represents the biomass at the time of death or last measurement. DRYBIO_BOLE is based on VOLCFSND and specific gravity information derived by the Forest Products Lab and others (values stored in the REF_SPECIES table). If VOLCFSND is not available, then either VOLCFGRS * Percent Sound or VOLCFNET * (ratio of cubic foot sound to cubic foot net vol) is used. The source of specific gravity information for each species can be found by linking the REF_SPECIES table to the REF_CITATION table. Appendix J contains equations used to estimate biomass components in the FIADB.
DRYBIO_SAPLING	N(13,6)	Dry biomass of saplings. The ovendry biomass (pounds) of the above ground portion, excluding foliage, of live trees with a Diameter from 1 to 4.9 inches. Calculated for timber species only. The biomass of saplings is based on biomass computed from Jenkins and others (2003), using the observed diameter and an adjustment factor. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. Appendix J contains equations used to estimate biomass components in the FIADB.
DRYBIO_STUMP	N(13,6)	Dry biomass in the tree stump. The ovendry biomass (pounds) in the stump of timber species [trees where diameter is measured at breast height (DBH)] > 5 inches in diameter. The stump is that portion of the tree from the ground to the bottom of the merchantable bole (i.e., 1foot). This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. Estimated for live and dead trees. For dead or cut trees, this number represents the biomass at the time of death or last measurement. This attribute is blank (null) for timber species with DIA < 5.0 inches and for woodland species. See DRYBIO_WDLD_SPP for biomass of woodland species, and DRYBIO_SAPLING for biomass of trees with DIA < 5 inches. Appendix J contains equations used to estimate biomass components in the FIADB.

NRV_TREE_VOLUMES (cont.)

Name	Size	Description
DRYBIO_TOP	N(13,6)	Dry biomass in the top of the tree. The ovendry biomass (pounds) in the top and branches (combined) of timber species [trees where diameter is measured at breast height (DBH)] greater than or equal to 5 inches in diameter. DRYBIO_TOP includes the tip, the portion of the stem above the merchantable bole (i.e., above 4 inches DOB), all branches and excludes foliage. Estimated for live and dead trees. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. For dead or cut trees, this number represents the biomass at the time of death or last measurement. This attribute is blank (null) for timber species with DIA < 5.0 inches and for woodland species. See DRYBIO_WDLD_SPP for biomass of woodland species, and DRYBIO_SPLING for biomass of trees with DIA < 5 inches. Appendix J contains equations used to estimate biomass components in the FIADB.
DRYBIO_WDLD_SPP	N(13,6)	Dry biomass of woodland tree species. The ovendry biomass (pounds) of the aboveground portion, excluding foliage, of woodland species [trees where diameter is measured at root collar (DRC)]. Calculated on live and dead trees with a diameter greater than or equal to 1 inch. This is a per tree value and must be multiplied by TPA_UNADJ to obtain per acre information. This attribute is blank (null) for woodland species with DIA less than 1.0 inch and for all timber species. Appendix J contains equations used to estimate biomass components in the FIADB.
FORM_LOSS_PCT	N(3)	Amount of total volume that is lost due to form defects such as sweep, crook, etc. Stored in percent.
INTERNATIONAL_GROSS	N(6,2)	Gross volume of the tree's merchantable portion in international standards. Stored in board feet. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4.
INTERNATIONAL_NET	N(6,2)	Net volume of the tree's merchantable portion in international standards. Stored in board feet.
INTERNATIONAL_VOL_REF	VC(10)	Volume equation used to calculate the International volume.
MERCH_BOARD_GROSS	N(8,2)	Gross volume of the tree's merchantable portion. Stored in board feet. For Region 9, is either the Scribner or International 1/4 board foot volume, depending on the forest. The Chippewa, Superior, Chequamegon-Nicolet, Ottawa, and Hiawatha get Scribner. All other forests get International 1/4.
MERCH_BOARD_NET	N(8,2)	Net volume of the tree's merchantable portion. Stored in board feet.
MERCH_BOARD_VOL_REF	VC(10)	Volume equation used to calculate the Merchantable Board volume.

NRV_TREE_VOLUMES (cont.)

Name	Size	Description
MERCH_CORD_GROSS	N(6,2)	Gross volume of the tree's merchantable portion. Stored in cords.
MERCH_CORD_VOL_REF	VC(10)	Volume equation used to calculate the Merchantable Cord Gross volume.
MERCH_CUBIC_GROSS	N(6,2)	Gross volume of the tree's merchantable portion. Stored in cubic feet.
MERCH_CUBIC_NET	N(6,2)	Net volume of the tree's merchantable portion. Stored in cubic feet.
MERCH_CUBIC_VOL_REF	VC(10)	Volume equation used to calculate the Merchantable Cubic volume.
MODIFIED_BY	VC(30)	The name of the person who modified the record.
MODIFIED_DATE	DATE	The date the record was modified.
MODIFIED_IN_INSTANCE	N(6)	The database ID where the record was modified.
ROT_LOSS_PCT	N(3)	Amount of total volume lost due to rot. Stored in percent.
ROW_ACCESS_CODE	VC(6)	Control field to support row level access.
TOPWOOD_CORD_GROSS	N(6,2)	Gross volume of the tree's non-merchantable portion. This is generally the remainder of the volume once the merchantable volume has been subtracted from the total volume of a tree. Stored in cords.
TOPWOOD_CORD_GROSS_VOL_REF	VC(10)	Volume equation used to calculate topwood Cord volume.
TOPWOOD_GROSS	N(6,2)	Gross volume of the tree's non-merchantable portion. This is generally the remainder of the volume once the merchantable volume has been subtracted from the total volume of a tree. Stored in cubic feet.
TOPWOOD_NET	N(6,2)	Net volume of the tree's non-merchantable portion. This is generally the remainder of the volume once the merchantable volume has been subtracted from the total volume of a tree. Stored in cubic feet.
TOPWOOD_VOL_REF	VC(10)	Volume equation used to calculate topwood volume.
TOTAL_GROSS	N(6,2)	Entire gross volume of the tree. Stored in cubic feet.
TOTAL_NET	N(6,2)	Entire net volume of the tree. Stored in cubic feet.
TOTAL_VOL_REF	VC(10)	Volume equation used to calculate the total volume.
VOID_LOSS_PCT	N(3)	Amount of total volume that is lost due to hollows, soft rot, fire char, missing top, or branches. Stored in percent.
VOLUME_LOSS_PCT	N(3)	Amount of total volume that is missing due to an unusual defect or disease. Stored in percent.
VOLUME_TREE_HEIGHT	N(5,2)	Height used to estimate volumes. Stored in feet.