

- ▶ **Scenery as a public resource**
- ▶ **Baseline Visual Assessment**

# ▶ POP QUIZ...

*“The beauty of our land is a natural resource. Its preservation is linked to the inner prosperity of the human spirit.”*

*“The beauty of our land is a natural resource. Its preservation is linked to the inner prosperity of the human spirit.”*



**President Johnson- address to Congress February 8, 1965**



## White House Conference on Natural Beauty

May 24, 1965

- City and rural landscapes
- Pollution: *Air, water, litter, junkyards, pesticides*
- Solid waste management
- Sewage waste management
- Highway beautification
- Electrical transmission lines
- National trails system
- Rivers
- Wilderness
- Greenhouse gas emissions



## White House Conference on Natural Beauty

May 24, 1965

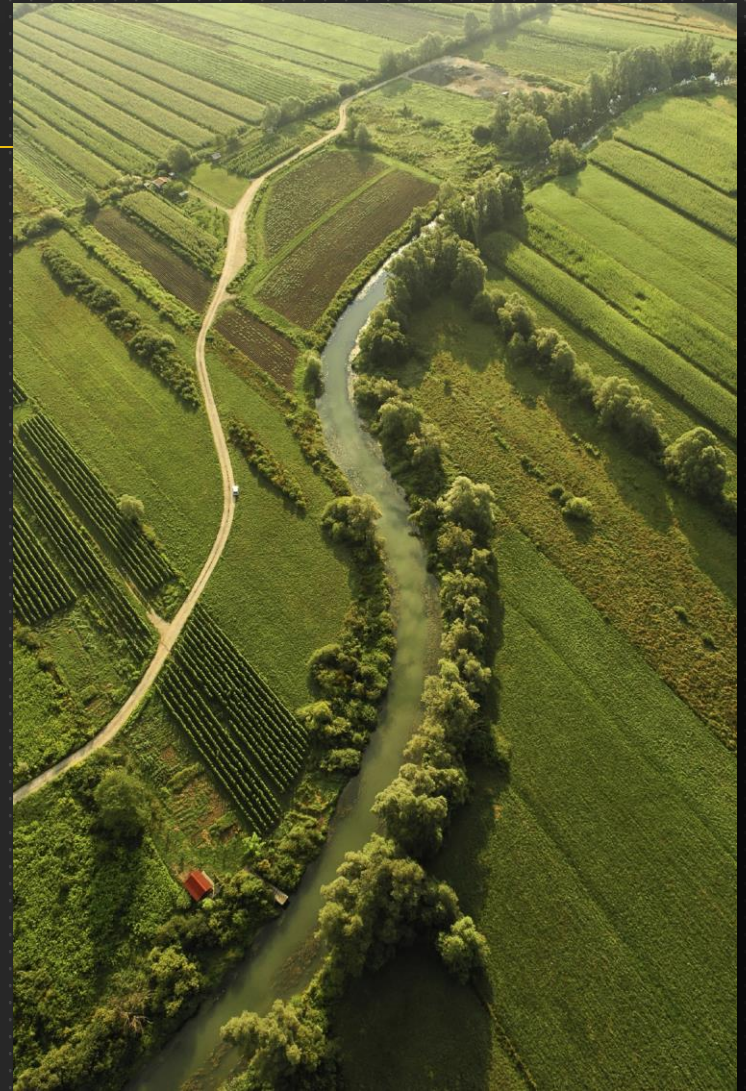
- ▶ Highway Beautification Act (HBA), 1965
- ▶ Wild and Scenic Rivers Act, 1968
- ▶ National Trails System Act, 1968
- ▶ National Environmental Policy Act, 1969
- ▶ Clean Air Act, 1970
- ▶ Clean Water Act, as amended 1972
- ▶ Resource Conservation and Recovery Act, 1976
- ▶ Surface Mining Control and Reclamation Act, 1977
- ▶ National Forest Management Act, 1976
- ▶ Federal Land Policy and Management Act, 1976



## Big Picture

---

- Scenery is a Public Resource
  - (aesthetic/ visual/ scenic)
- Landscape/ Community Character
  - James K. Knight Foundation- “Place”
- Inventory, Manage, and Monitor





No one “owns” the view of scenic resources.





No one “owns” the view of scenic resources.

*The charming landscape which I saw this morning is indubitably made up of some twenty or thirty farms. Miller owns this field, Locke that, and Manning the woodland beyond.*

*But none of them owns the landscape...*

*...This is the best part of these men's farms, yet to this their warranty-deeds give no title.*

Ralph Waldo Emerson

# Vanishing Resource





# Vanishing Resource





Scenic character is at risk of becoming a vanishing resource.





It makes a difference....



It makes a difference....





# Four Steps for Scenic Conservation

- (1) Engage Partners
- (2) Inventory & Map Visual Quality
- (3) Identify Scenic Issues
- (4) Develop Strategies



Scenic Conservation Action Plan

# STEP (4): Develop Strategies & Action Plan

- ▶ **(1) Education**
  - ▶ presentations to city or town councils
  - ▶ contributing articles to newsletters and newspapers
- ▶ **(2) Voluntary Measures**
  - ▶ non-binding landowner agreements
  - ▶ Clean-up and restoration efforts
- ▶ **(3) Incorporation into Mgt. Objectives**
  - ▶ Objectives for adjacent Land Mgt. Agencies, Jurisdictions
  - ▶ Objectives within Corridor Management Plan for Byway
- ▶ **(4) Incentives**
  - ▶ Grants for planting and landscaping
  - ▶ Funds for community improvement projects
- ▶ **(5) Acquisition/Purchase**
  - ▶ Conservation easements
  - ▶ Sensitive property acquisition
- ▶ **(6) Regulatory Measures**
  - ▶ Design review
  - ▶ Historic preservation ordinances

- ▶ Scenery as a public resource
- ▶ **Baseline Visual Assessment**



# Long Distance Landscapes

## CONDUCTING A BASELINE VISUAL ASSESSMENT FOR **THE PACIFIC NORTHWEST NATIONAL SCENIC TRAIL**



Presented by:

Brad Cownover and Matt Ramich  
Landscape Architects, US Forest Service



# OVERVIEW:



- ▶ Objectives
- ▶ Benefits
- ▶ Methods & Results
- ▶ Next Steps & Lessons Learned



# PROJECT OVERVIEW





# LANDSCAPE ARCHITECTURE DETAIL

**Byron Stringham**

**David Fothergill**

**Matt Ramich**

# OBJECTIVES AND PRINCIPLES

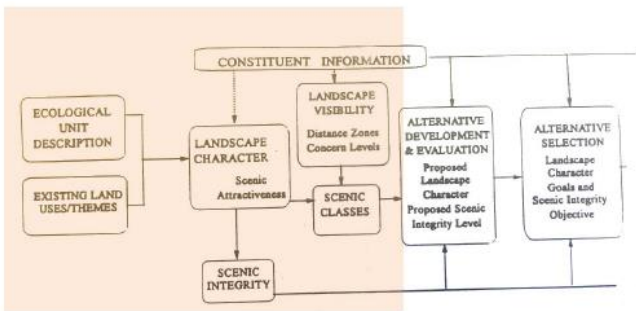
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- ▶ Compile existing scenery resource information currently available across multiple jurisdictions
- ▶ Obtain a baseline visual (scenic) inventory and landscape character assessment;
- ▶ Evaluate existing landscape (scenic) character;
- ▶ Produce a seen – area (visibility) and viewshed analysis;
- ▶ Evaluate existing scenic integrity and stability; and
- ▶ Complete an on – site (field based) visual resource analysis and photographic documentation from the trail corridor.

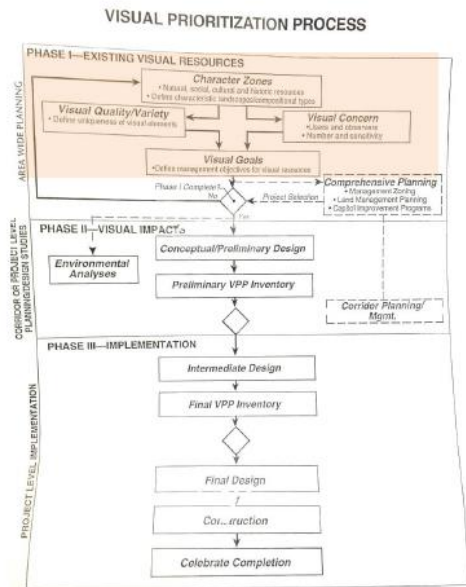
# BENEFITS...

---

- ▶ Document existing conditions
- ▶ Monitor change over time
- ▶ Assist with Optimal Location Review
- ▶ Protect Quality of Trail Experience
- ▶ Restore / Enhance (from what, to what?)
- ▶ Define distinctiveness, Zones of experience
- ▶ Assess Public Sensitivity
- ▶ Reflect Intrinsic Values/ Benefits to Communities
- ▶ Etc...
- ▶ **Inform Comprehensive Plan**

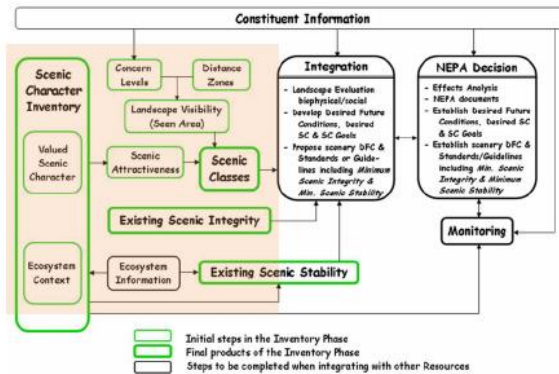


SMS (FS)



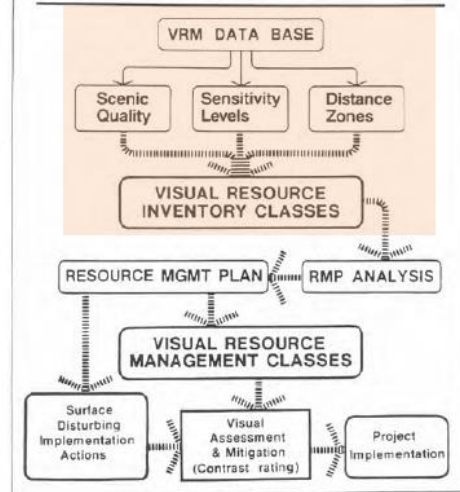
VPP (Federal Highways)

Visual Inventory (or Assessment) Portion =

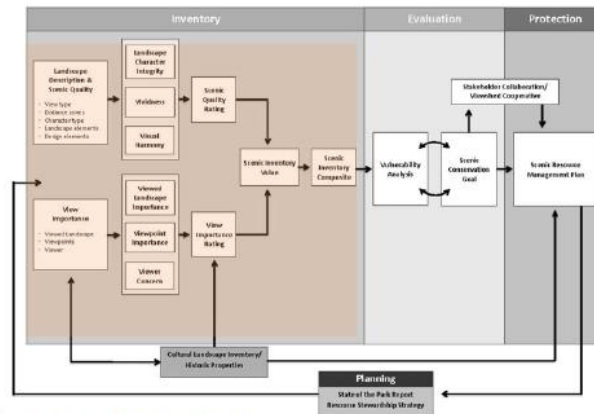


SMS Appendix J (FS)

### Visual Resource Management



VRM (BLM)



Scenery Conservation System (NPS)

# MERGING TWO SYSTEMS

---

- ▶ Forest Service Scenery Management System
  - ▶ Referenced Terminology from USFS Landscape Management and Landscape Aesthetics, Agriculture Handbook 701 for scenery analysis.
  
- ▶ Bureau of Land Management Visual Resource Inventory
  - ▶ Referenced Terminology from BLM Manual H-8410-1



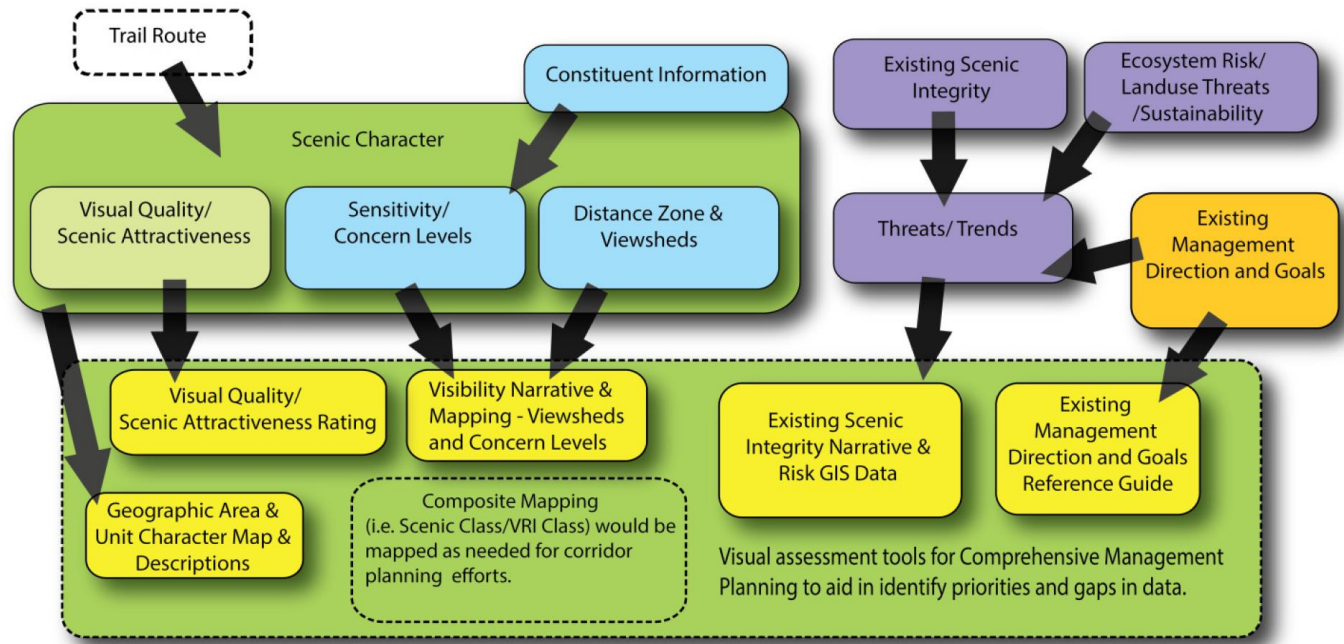
# The 'SCENIC' Resource Principles

- ✓ Condition
- ✓ Sensitivity to Change
- ✓ Visibility

# FLOW CHART WALKTHROUGH

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS

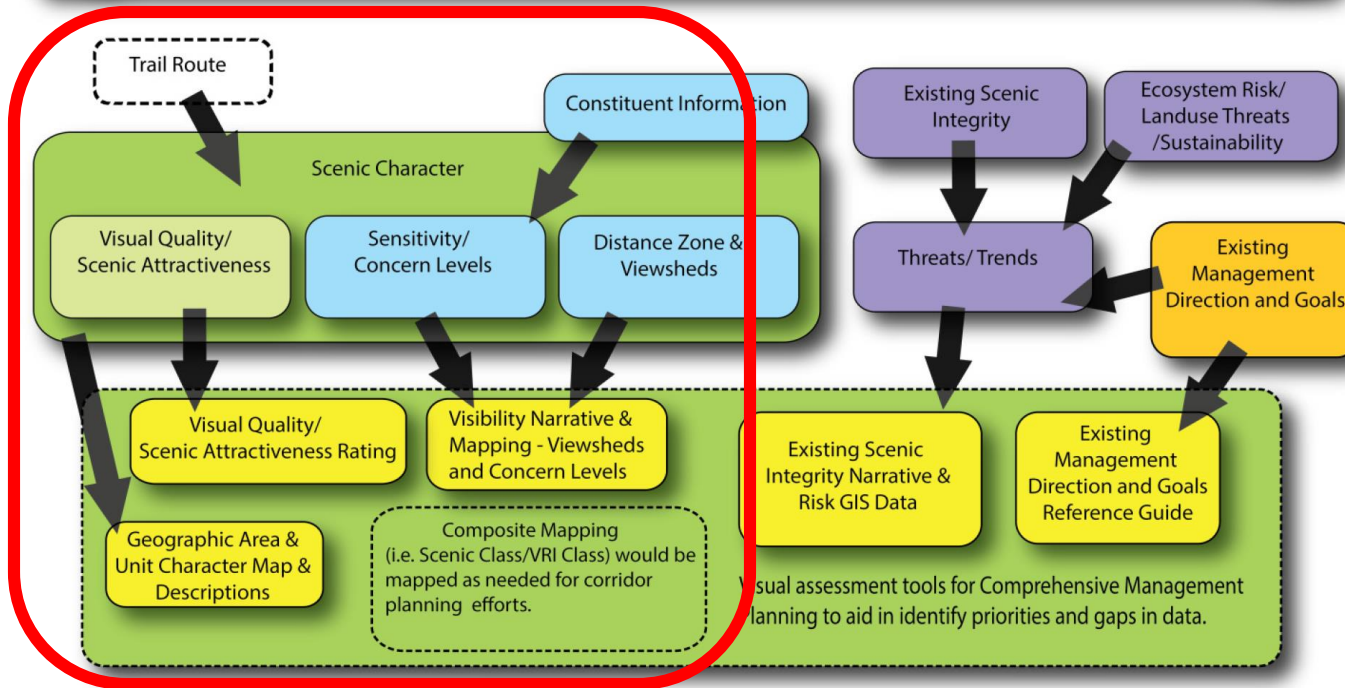






# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS





# Landscape (Scenic) Character

“A combination of the physical, biological and cultural images that gives an area its positive scenic identity and contributes to its sense of place.”

Scenic Character  
the essential scenery resource  
to be protected and restored

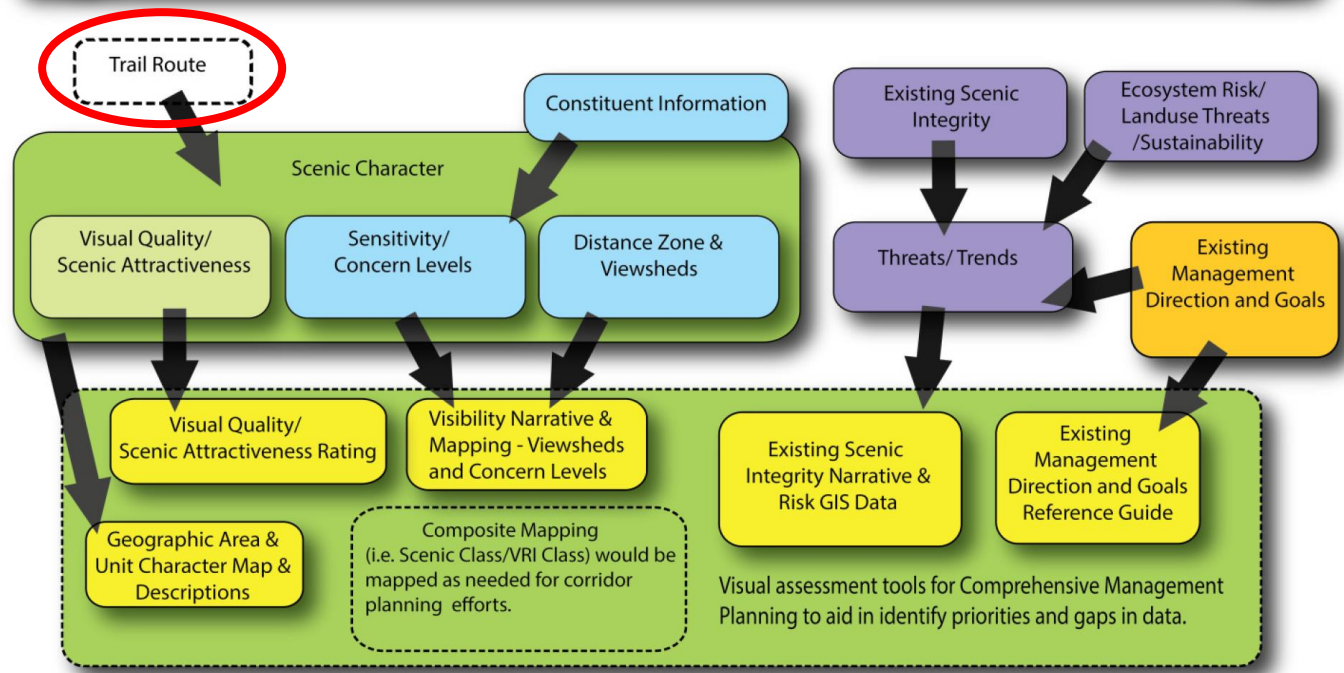
Seen Experience of the PNT Traveler



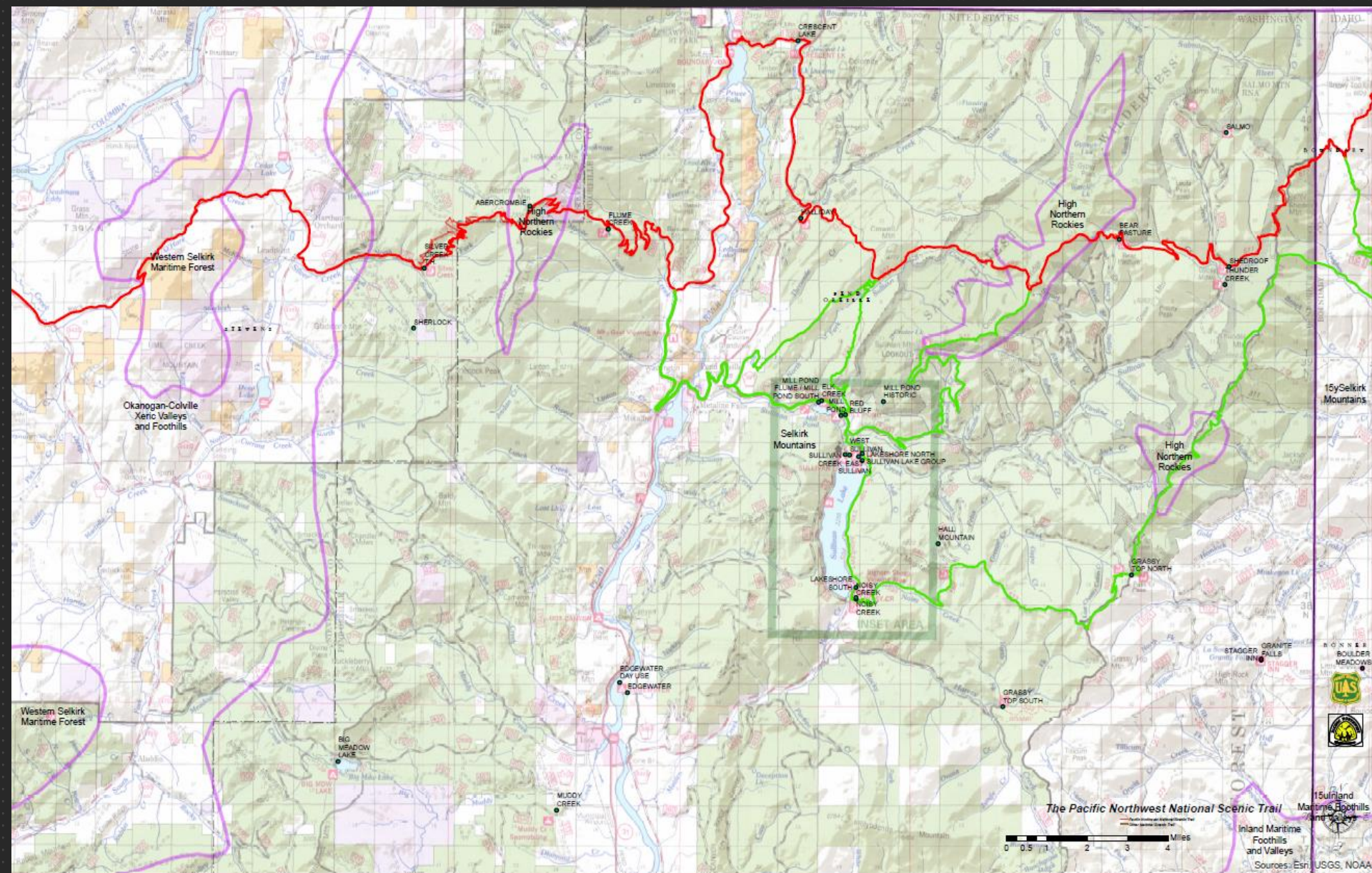
# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS

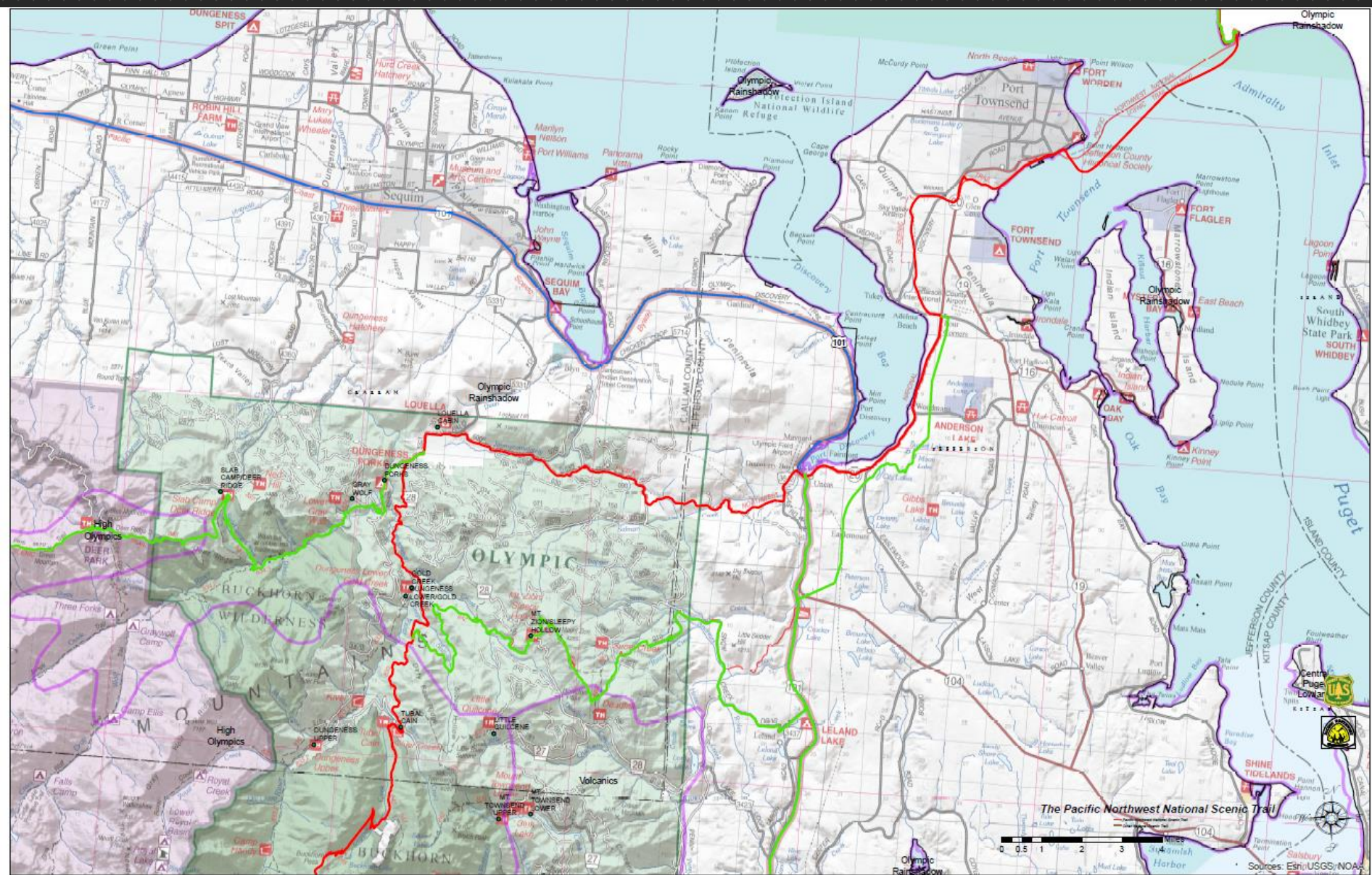










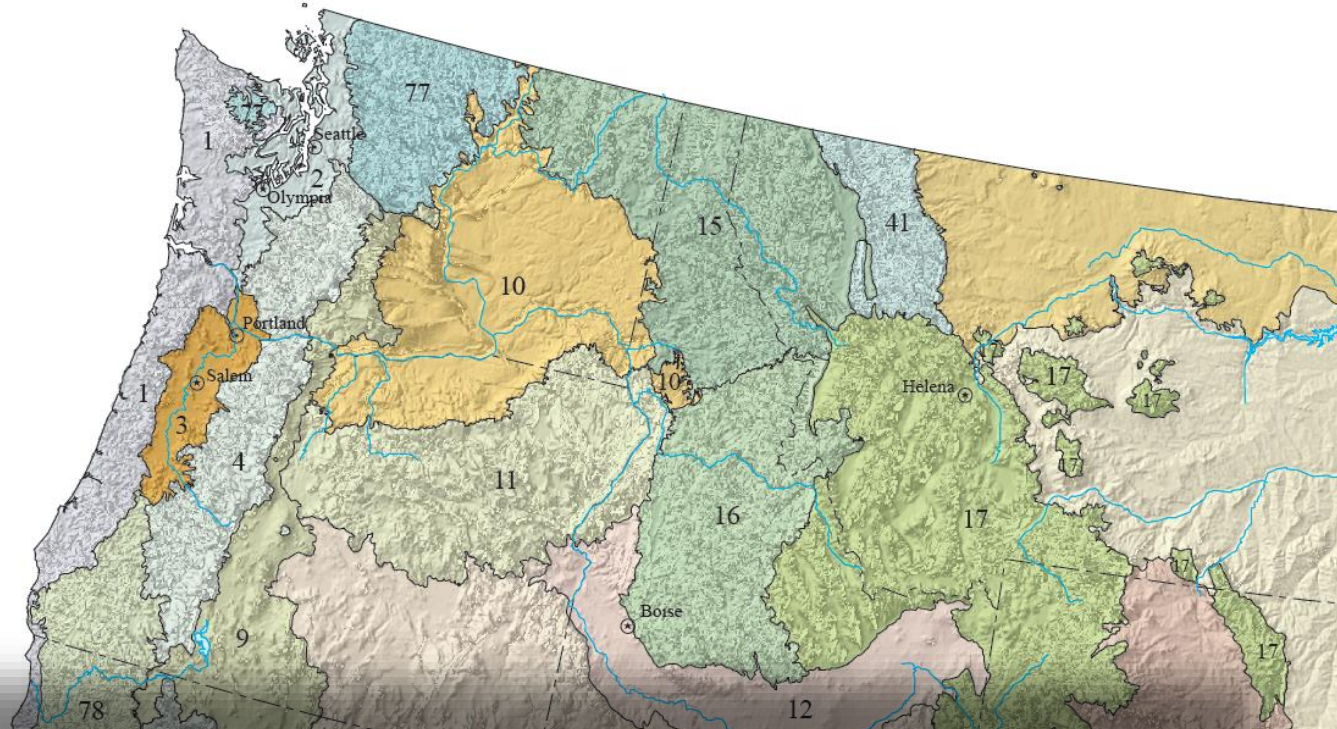




# REGIONS... ZONES

LEVEL III

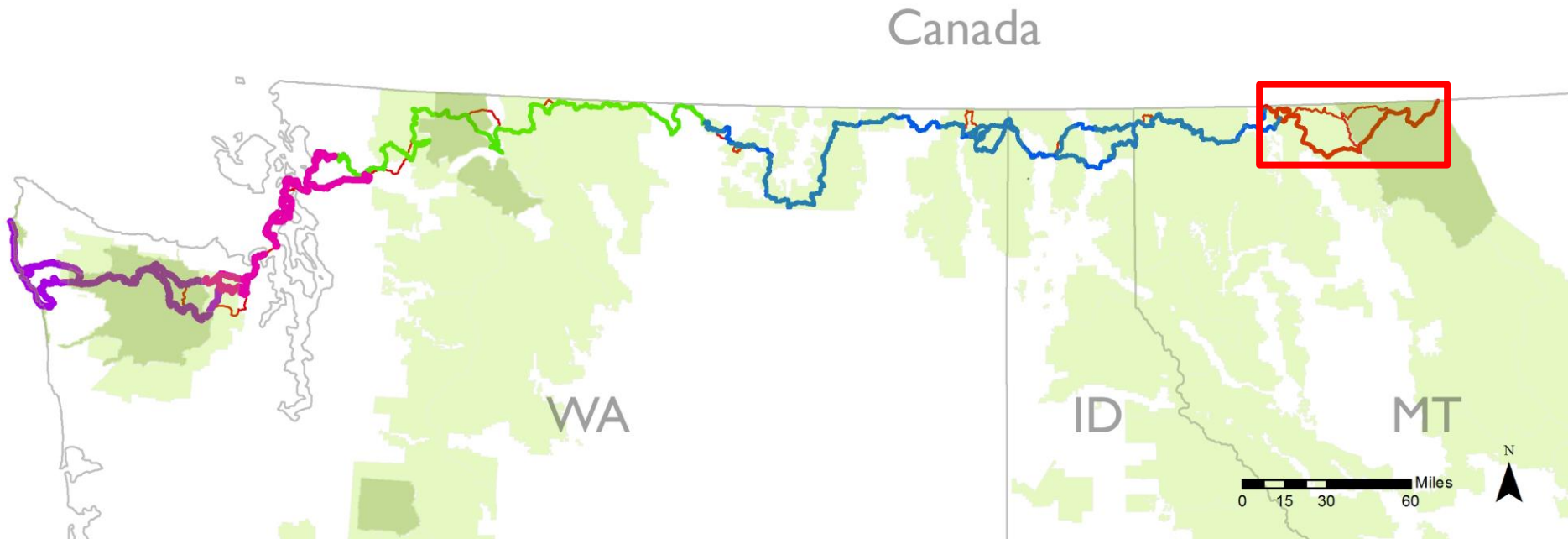
- 1. Coast Range
- 2. Puget Lowland
- 3. Willamette Valley
- 4. Cascades
- 5. Sierra Nevada
- 6. Central California Foothills and Coastal Mountains
- 7. Central California Valley
- 8. Southern California Mountains
- 9. Eastern Cascades Slopes and Foothills
- 10. Columbia Plateau
- 11. Blue Mountains
- 12. Snake River Plain
- 13. Central Basin and Range
- 14. Mojave Basin and Range
- 15. Northern Rockies
- 16. Idaho Batholith
- 17. Middle Rockies



Organization	Unit				
EPA Level III Ecoregions	Coast Range	Puget Lowland	North Cascades ( includes small sliver of Columbian Plateau)	Northern Rockies	Canadian Rockies
PNTA	Olympic Region	Puget Sound	North Cascades	Eastern Washington	Rocky Mountains
FS	Olympic Peninsula	Puget Sound	North Cascades	Okanogan Highlands	Rocky Mountains

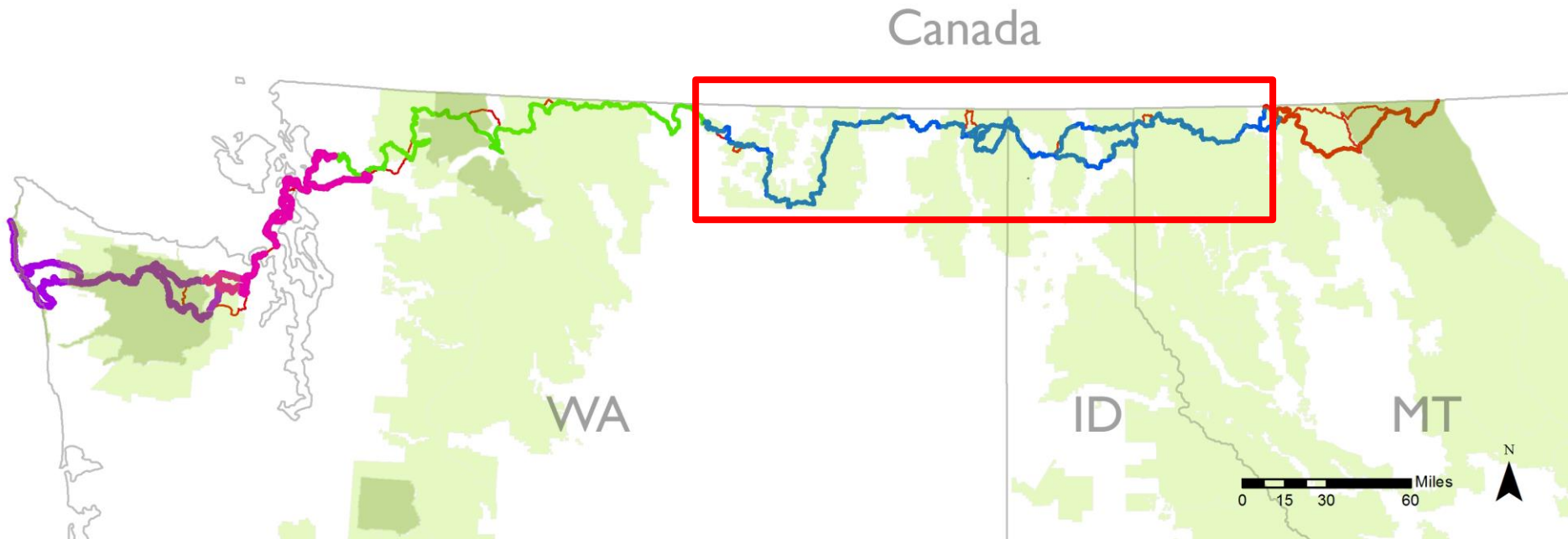
# REGIONS

## Rocky Mountains – A Units



# REGIONS

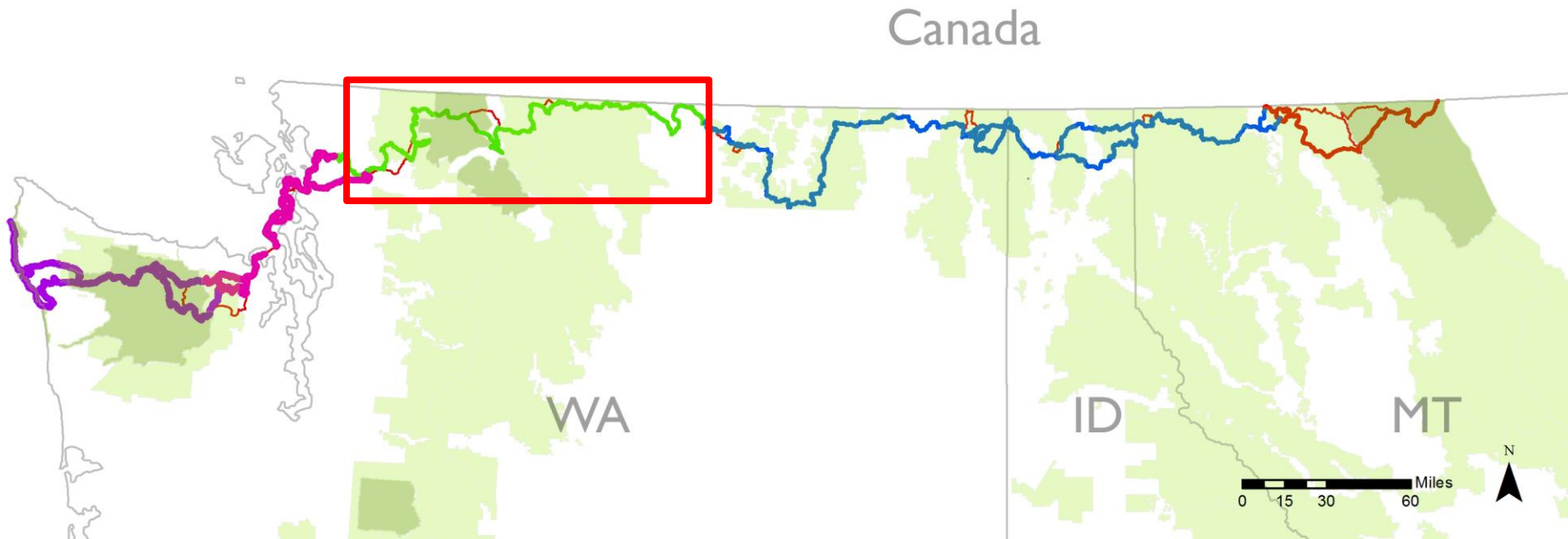
## Columbian Rockies - B Units





# REGIONS

## North Cascades – C Units





# REGIONS

Puget Sound – D Units



# REGIONS

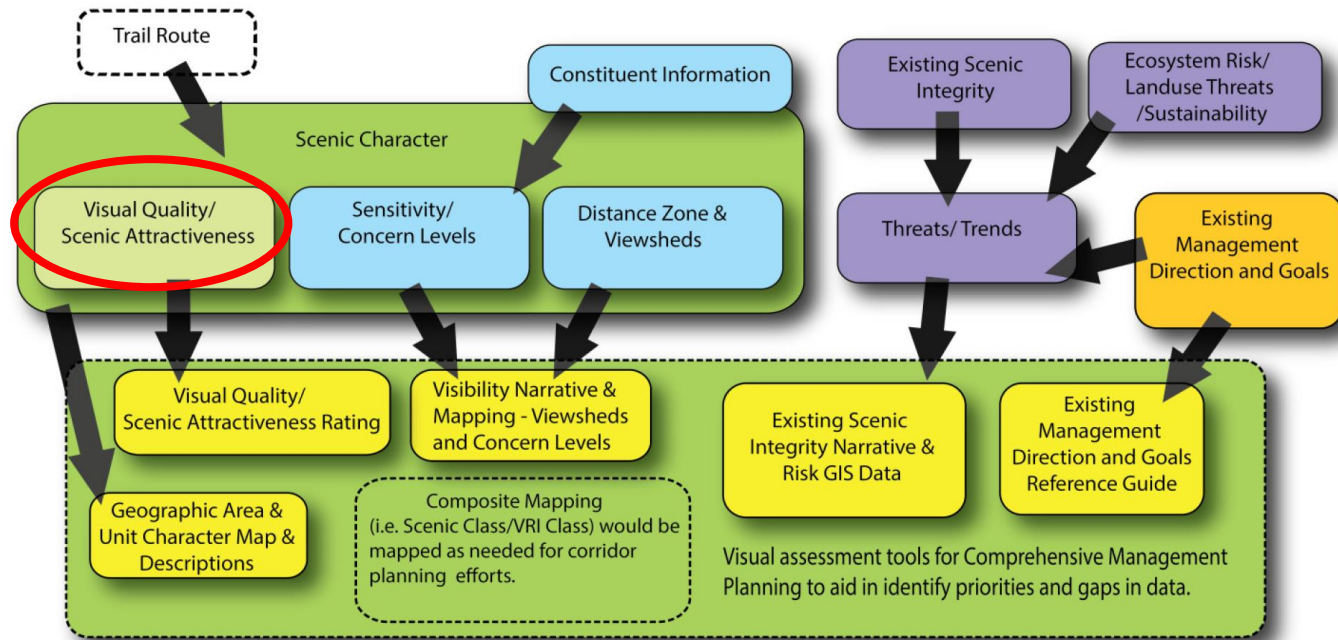
## Olympic Peninsula – E Units



# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS





# Visual (Scenic) Quality/ Scenic Attractiveness

Measures the scenic importance of a landscape based upon perceptions of the intrinsic beauty of landform, rock form, vegetative patterns, water characteristics, cultural land use

- **Class A = Distinctive**
- **Class B = Typical**
- **Class C = Indistinctive**

- Variety
- Unity
- Vividness
- Mystery
- Intactness
- Coherence
- Harmony
- Uniqueness
- Pattern
- Balance



## Physiographic Province





PNNST Visual Inventory

Date: 7/5/15

Geographic Area: N ROCKIES

Scenic Character Unit: KOOTENAI VALLEY

B-8

Scenic Character Description:

Scenic Attractiveness/ Visual Quality (Variety, Unity, Vividness, Mystery, Intactness, Coherence, Harmony, Uniqueness)	
Landform Spatial Definition	L M <u>H</u>
Rock Features	<u>L</u> M H
Vegetation Patterns	L <u>M</u> H
Surface Water Characteristics	L M <u>H</u>
Landmarks	L M <u>H</u>
Landuse Patterns	L M <u>H</u>
Built Features	L <u>M</u> H
Cultural/Sense of place	L M <u>H</u>
Score (Circle One)	<u>A</u> B C
Scenic Integrity	
Level of Natural Intactness	L <u>M</u> H
Wholeness	L <u>M</u> H
Score (Circle One)	VL L M <u>H</u> VH
Visibility	
Foreground View:	RIVER
Middleground View:	AGRICULTURE
Background View:	SELKIRK'S PURCELLS

Vegetation:

LITTLE RIPARIAN EDGE  
COTTONWOODS  
TEXTURE OF FORESTED SLOPES  
PASTORAL

Land Use:

FARMLAND HOPS, WHEAT, MUSTARD?  
FORESTRY  
BLACKWATER RIVER  
LEVEES  
PATCHWORK PATTERNS  
PASTURE GRASS - MONOCULTURE

Landform:

FLAT VALLEY  
MEANDER OF LARGE RIVER  
FORESTED, SELKIRK'S PURCELLS  
WITH "BRUSHLANDS"  
JUST A HINT OF SELKIRK CREST  
STEEP SLOPES DOWN TO FLAT VALLEY

Features:

- RIVER
- FARMLAND
- MOUNTAINS
- BIG VIEWS

Other Comments:

RATTLING OF COTTONWOODS  
BATTLE OF WIND BURST  
CHIRPING OF SWALLOWS  
FULL LIGHT  
QUIET  
PEACEFUL  
BORDER PATROL  
SLEEPY  
SMOKEY  
NOT MANY STRUCTURES BUT  
EVIDENCE OF MODIFICATION  
FOR FLOODPLAIN AGRICULTURE

GPS Location:

Photographs:

B 0702-0725



# Scenic Quality

## Seven scenic quality factors



Landform



Vegetation



Water



Color



Adjacent Scenery



Scarcity



Cultural  
Modifications

Key Factors	Rating Criteria and Score		
Landform	High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops, or severe variation or highly eroded formations including major dune systems or detail features dominant and exceptionally striking and intriguing such as glaciers. 5	Steep canyons, mesas, buttes, cinder cones, and drumlins, or interesting erosional patterns of variety in size and shape of landforms, or detail features which are interesting though not dominant. 3	Low rolling hills, foothills, or flat valley bottoms, or few or no interesting landscape features. 1
Vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns. 5	Some variety of vegetation, but only one or two major types. 3	Little or no variety or contrast in vegetation. 1
Water	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape. 5	Flowing, or still, but not dominant in the landscape. 3	Absent, or present, but not noticeable. 0
Color	Rich color combinations, variety or vivid color, or pleasing contrasts in the soil, rock, vegetation, water or snow fields. 5	Some intensity or variety in colors and contrast of the soil, rock and vegetation, but not a dominant scenic element. 3	Subtle color variations, contrast, or interest, generally mute tones. 1
Influence of Adjacent Scenery	Adjacent scenery greatly enhances visual quality. 5	Adjacent scenery moderately enhances overall visual quality. 3	Adjacent scenery has little or no influence on overall visual quality. 0
Scarcity	One of a kind or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc. *5+	Distinctive, though somewhat similar to others within the region. 3	Interesting within its setting, but fairly common within the region. 1
Cultural Modifications	Modifications add favorably to visual variety while promoting visual harmony. 2	Modifications add little or no variety to the area, and introduce no discordant elements. 0	Modifications add variety but are very discordant and promote strong disharmony. -4

Figure Source: BLM Manual H-8410-1, Illustration 2.

\* A rating of greater than 5 can be given but must be supported by written justification.

PNNST Visual Inventory

Date: 8/31/2015

Geographic Area: COAST RANGE (OLYMPIC PENINSULA) B-44

Scenic Character Unit: LOW OLYMPICS (ELWHA RIVER)

Visual Quality / Scenic Attractiveness (Variety, Unity, Vividness, Mystery, Intactness, Coherence, Harmony, Uniqueness)	
Landform	B 3, 1 pts
Vegetation	B 3, 1 pts
Water	B 3, 0 pts
Color	5/B 1 pts
Influence of Adjacent Scenery / Viewshed	5/B 0 pts
Scarcity	5+ B 1 pts
Cultural Modification / Sense of place (Also see Scenic Integrity)	A 0, -4 pts
A=19+, B=12-18, C=11- Score (Circle One)	B C
Scenic Integrity	
Level of Natural Intactness	H B L
Wholeness	B M L
Score (Circle One)	VL L M H B
Visibility (Sensitivity/Concern Level/Viewshed)	
Foreground View:	RIPARIAN CORRIDOR TUNNEL OF TREES OPENINGS IN CANOPY IS LIMITED
Middleground View:	GLIMPSES OF RIVER RIVER PROCESSES
Background View:	LIMITED SOME ROCK OUTCROPS FORESTED UPLAND SLOPES

Scenic Character Description:

Vegetation:

BIG TREES  
 • DOUG FIR  
 • BIG LEAF MAPLE  
 • W RED CEDAR  
 RIPARIAN  
 VINE MAPLES  
 SWORD FERN  
 EPIPHYTIC Moss LICHEN  
 PACIFIC MADRONES !!  
 FERNY HABITAT UNDERSTORY  
 Land Use:  
 RECREATION  
 CONSERVATION  
 RESTORATION

Landform:

FLUVIAL PROCESSES  
 RIVER CANYONS  
 HOT SPRINGS  
 LAKE MILLS  
 EXPOSED ROCK EXPRESSES VOLCANIC HISTORY  
 RIVERINE RIPARIAN  
 POINT BAR CUTTING DEPOSITING DYNAMISM

Features:

RIVER  
 HOT SPRINGS (BOULDER)  
 ELVIN-ESQUE  
 COOL CULTURAL MODIFICATION OF  
 BREACHED PARK  
 MANAGEMENT GIVES RURAL CHARACTER IN DEV AREA  
 Other Comments:  
 TRAIL INTERACTS WITH RIVER  
 ABOVE MARYS FALLS CAMPGROUND  
 SALMONIDS  
 FULL SHADE IN MANY AREAS  
 QUIET  
 WET CLIMATE

DENSE FOREST

GPS Location:

Photographs:



**Landform Vegetation Water Color Adjacent Scenery Scarcity Cultural Modifications**

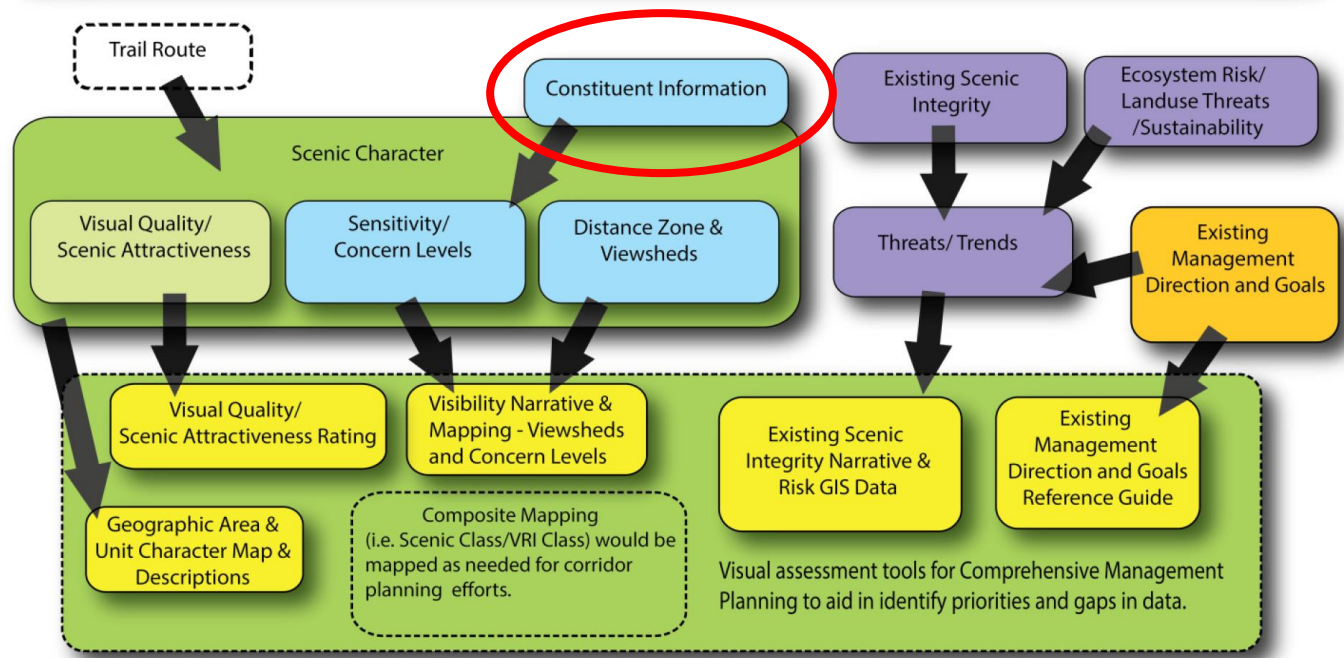


**PRACTICE?**

# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS

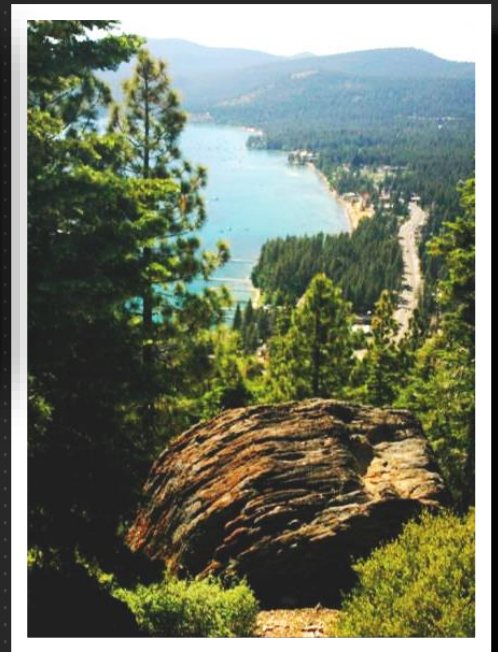






# Constituent Information

- ❖ how people use area
- ❖ preferences and thresholds for scenery condition
- ❖ PNT- Local Field Office as surrogates for formal survey of trail hikers
- ❖ Crowd-source potential-geophotos
- ❖ Comp. Planning can augment

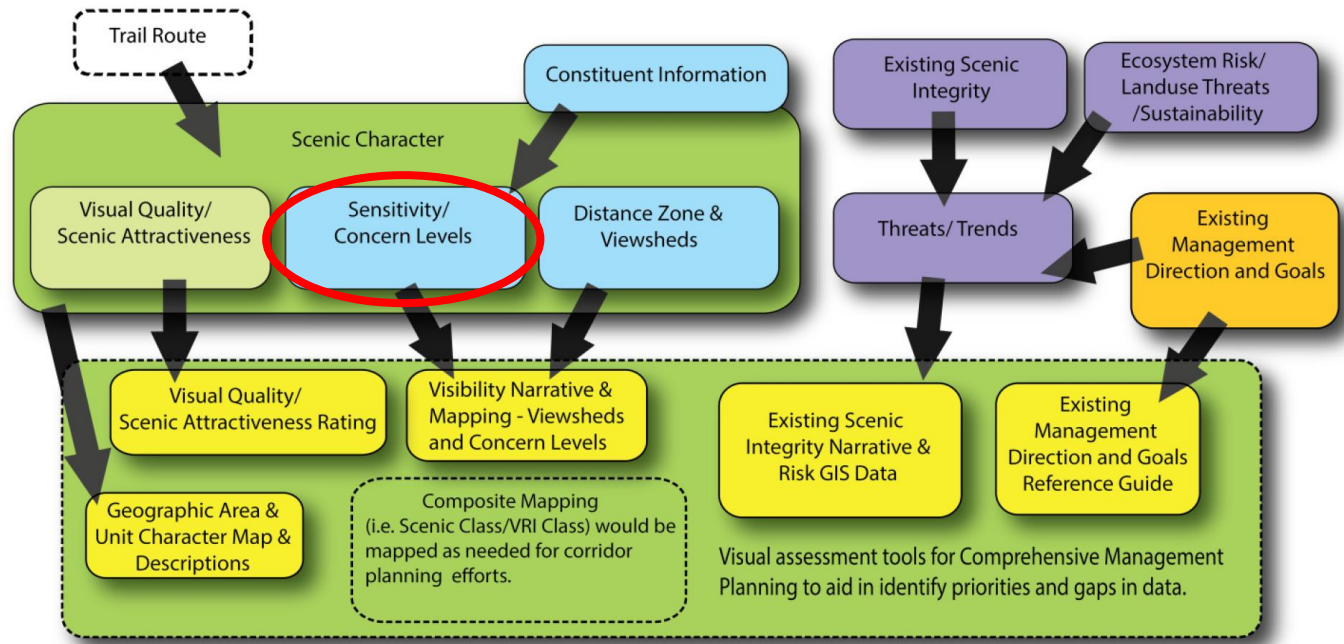




# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS





# Concern Levels

A measure of public concern for scenery as viewed from travelways, use areas, special places.

Based on numbers of viewers & social importance of the scenery



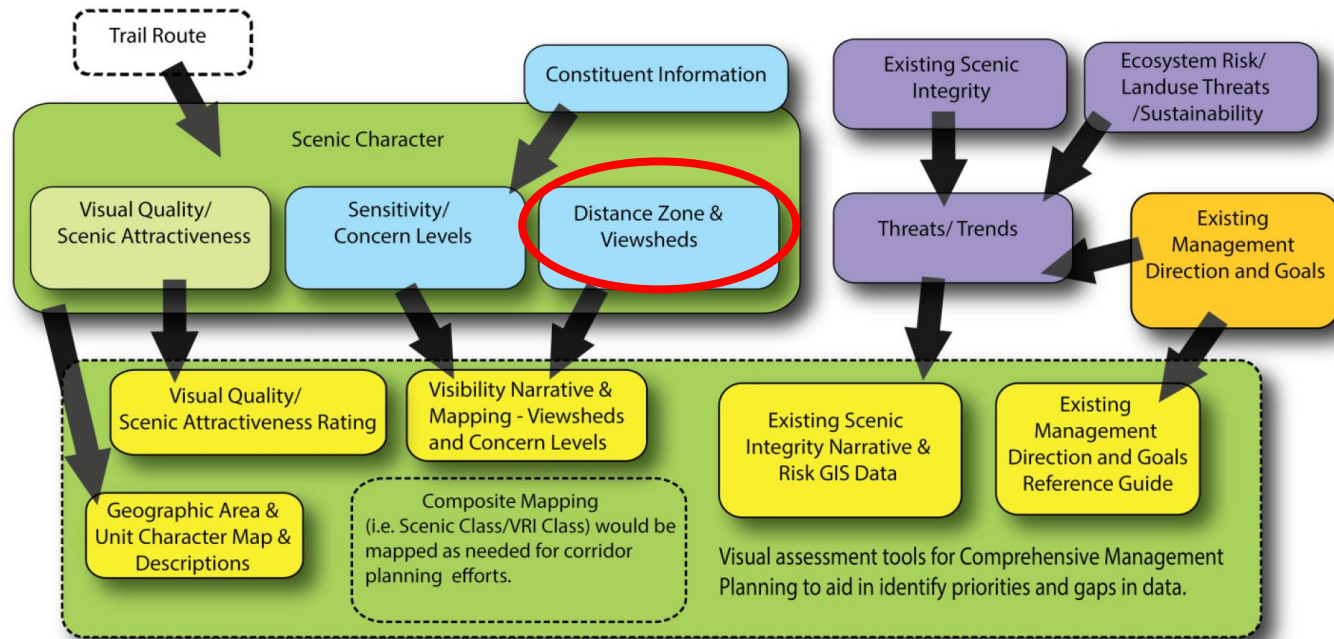
high 1

moderate 2

low 3

# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS





# Landscape Visibility



background = 4 mi to horizon

seldom seen areas

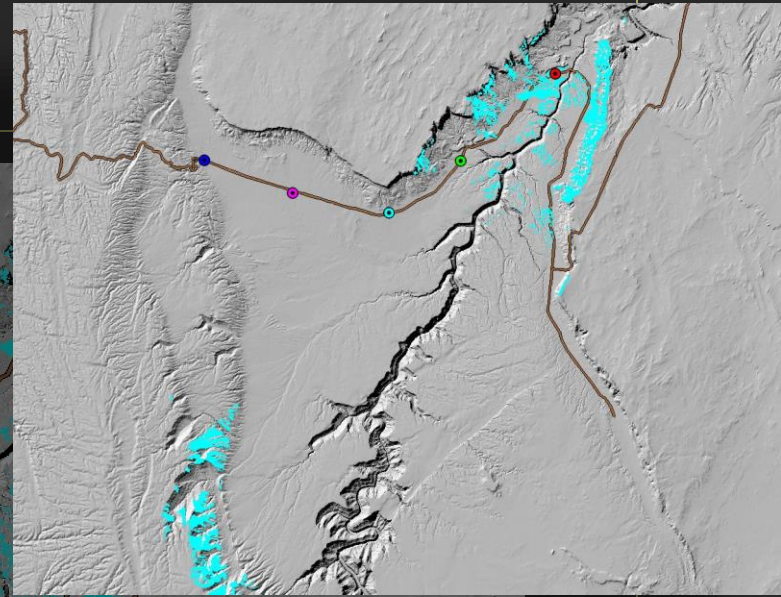
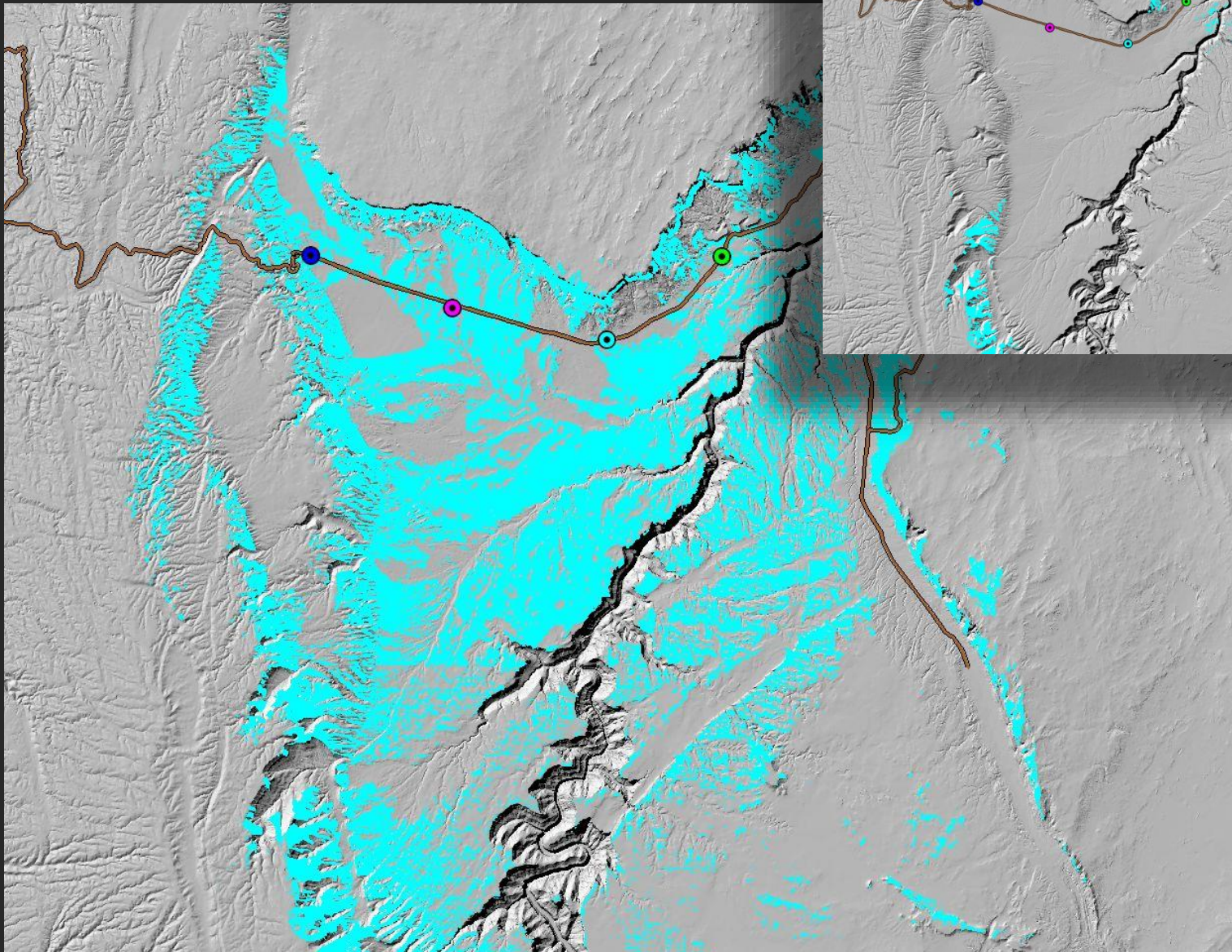
middle ground = 1/2 to 4 miles

foreground = 300' to 1/2 mile

immediate foreground = 0-300 feet

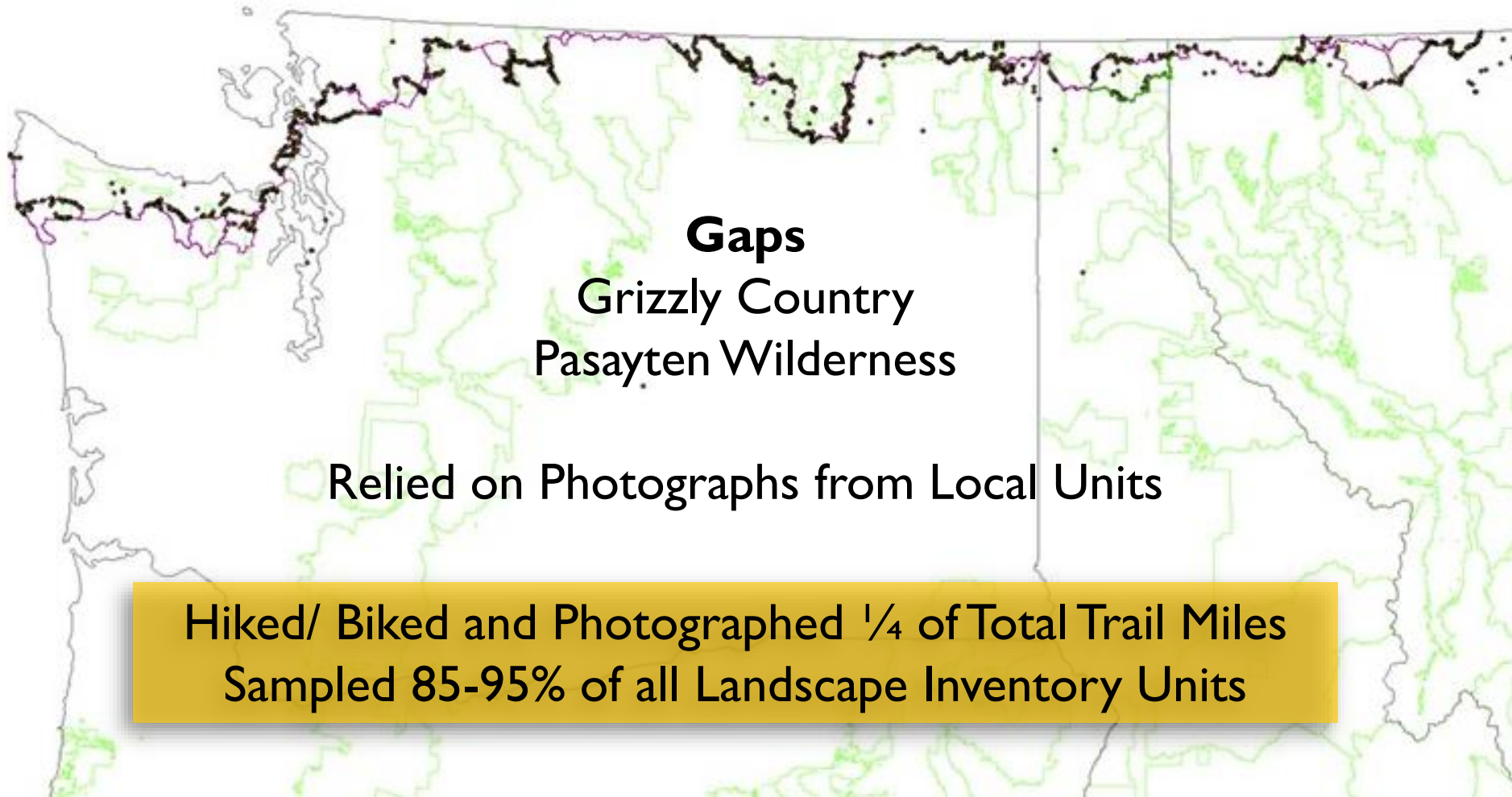


# Viewsheds





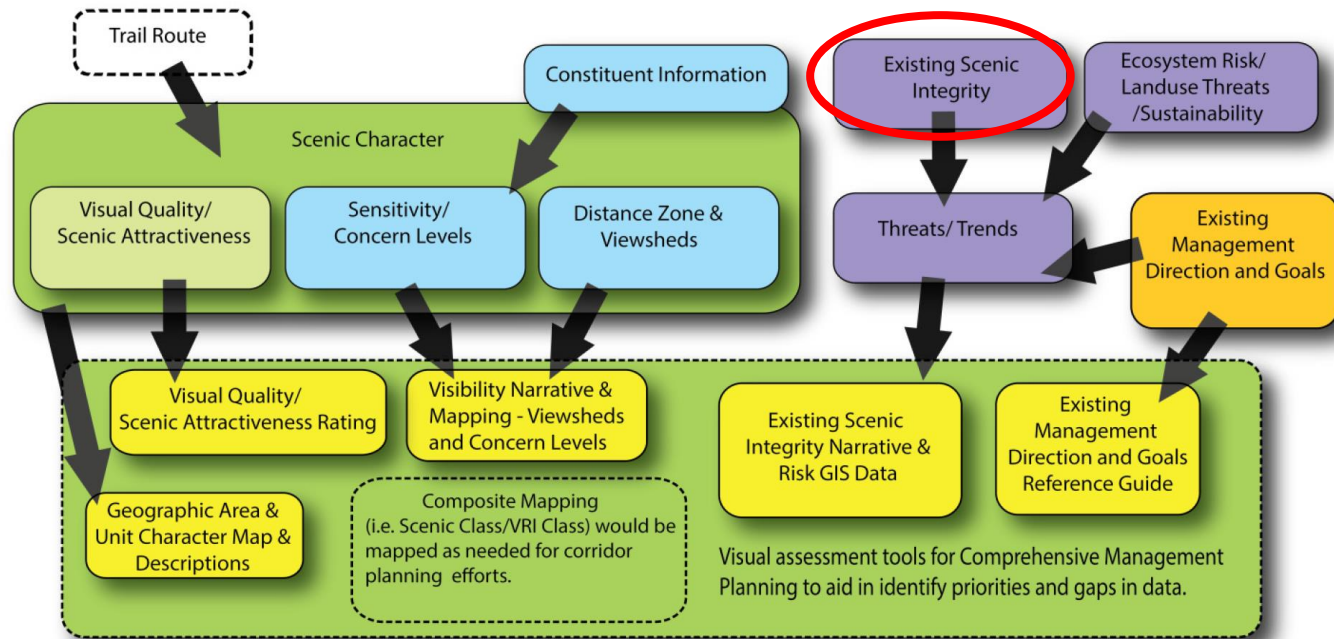
# PHOTO INVENTORY POINTS





# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS



# KEY INDICATOR

## Scenic Integrity

measures scenery disturbance of the scenic character, in 6 levels:

<u>SIO</u>		<u>VQO</u>
very high	no disturbance	P
high	unnoticed disturbance	R
moderate	minor disturbance	PR
-----		
low	co-dominant disturbance	M
very low	strong disturbance	MM
no integrity	excessive disturbance	UM

Scenic Integrity is emphasized within view of travelways, use areas and special places – measures existing/future disturbance & can define thresholds for future disturbance



very high integrity (Preservation VQO)



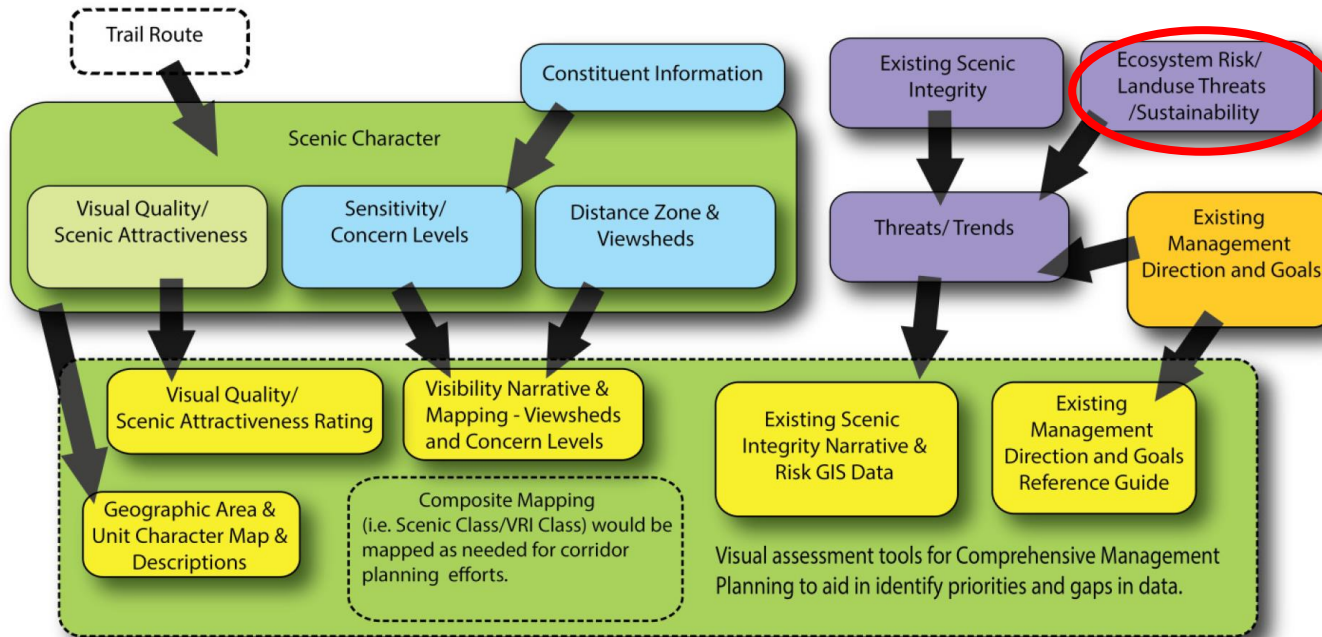
moderate integrity (Partial Retention) vqo



no integrity (Unacceptable Modification)

# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS



SUSTAINABILITY-

STABILITY...

-ecological

-social





tahoe scenery change, last 100 years



very low scenic stability

# KEY INDICATOR

## Scenic Stability

measures ecological sustainability of the valued scenic character attributes, in 6 levels:

very high	<u>all</u> attributes sustainable
high	<u>dominant</u> attributes sustainable
moderate	<u>most dom</u> attributes sustainable
-----	
low	<u>some dom</u> attributes sustainable
very low	<u>few dom</u> attributes sustainable
no stability	<u>no dom</u> attributes sustainable

Scenic Stability recognizes the often subtle, incremental changes that can severely diminish or eliminate valued scenic character – it uses historic range of variation as a reference baseline for sustainability

# The role of scenic stability:



**HIGH Scenic Integrity** Scenery appears intact, disturbances remain unnoticed.

**LOW Scenic Stability** The attractive aspen and large tree scenery attributes are being eliminated due to white fir encroachment and wildfire suppression -ecosystem conditions & stressors are outside of their historic range.

**Scenic Stability** addresses ecosystem influences on scenery with a quantifiable method to help direct ecosystems towards a socially desired, sustainable future.

# Prioritization Matrix

		Scenic Class						
		1	2	3	4	5	6	7
Highly Sustainable	Enhance or Maintain	Enhance or Maintain	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
Sustainable	Enhance or Maintain	Enhance or Maintain	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
Moderately Sustainable	Restore	Restore	Maintain or Restore	Maintain or Restore	Maintain	Maintain	Maintain	Maintain
Low Sustainability	Restore	Restore	Recommend Restoration	Recommend Restoration	Consider Restoration	Consider Restoration	Maintain	Maintain
Unsustainable	Restore	Restore	Recommend Restoration	Recommend Restoration	Consider Restoration	Consider Restoration	Consider Restoration	Consider Restoration

## Scenic Character Goals Development

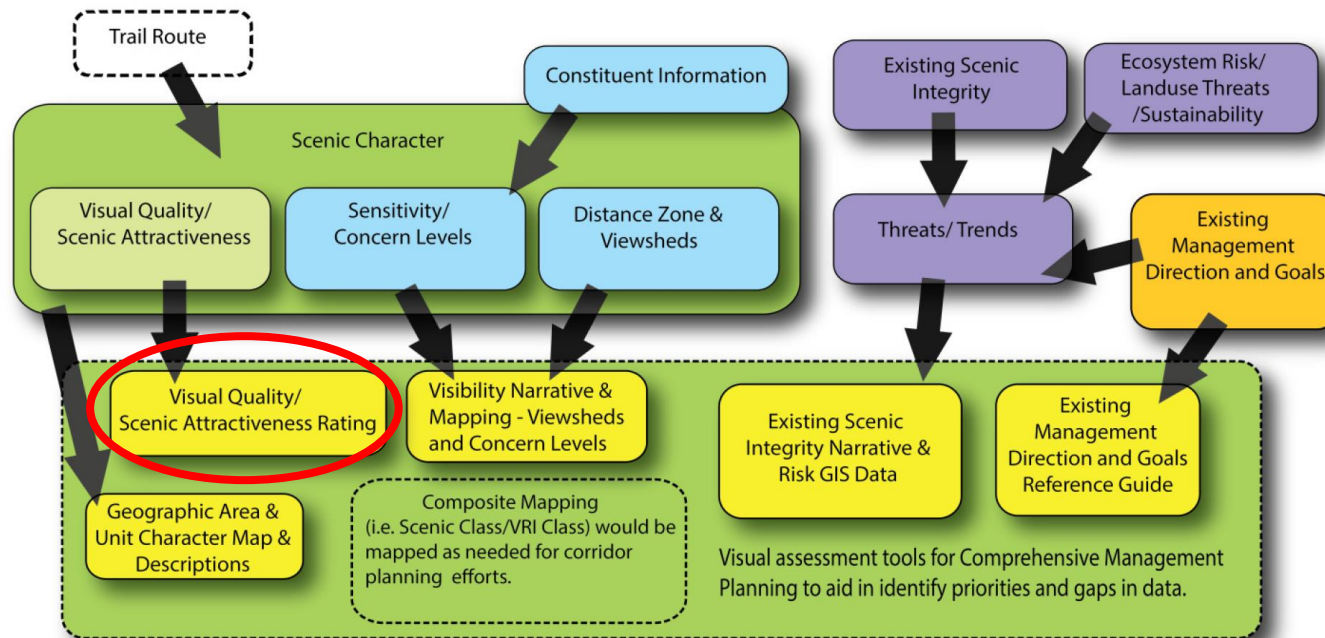




# WALKTHROUGH CONTINUED

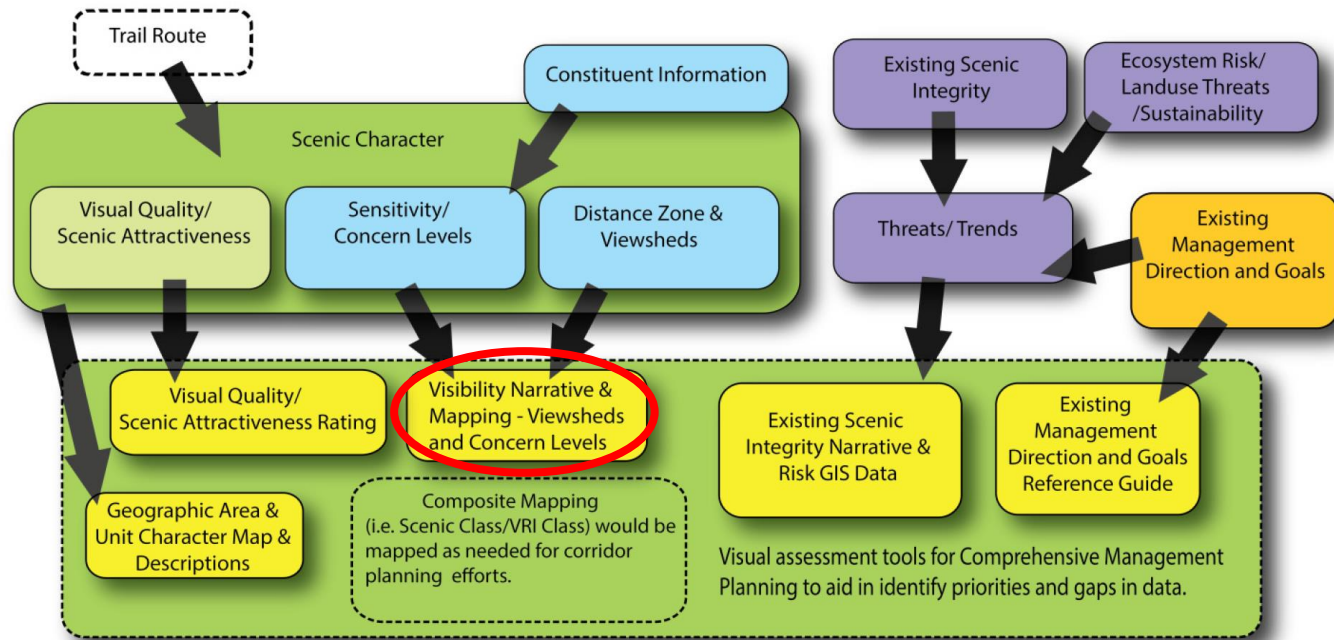
## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS





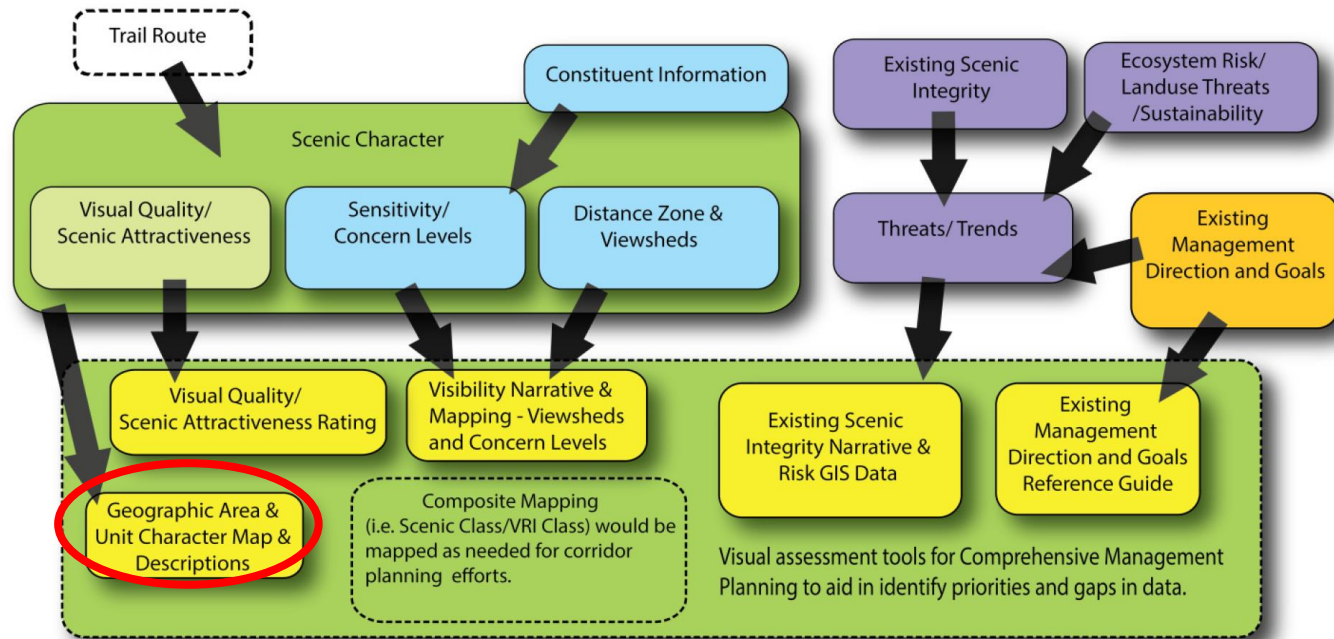
# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS



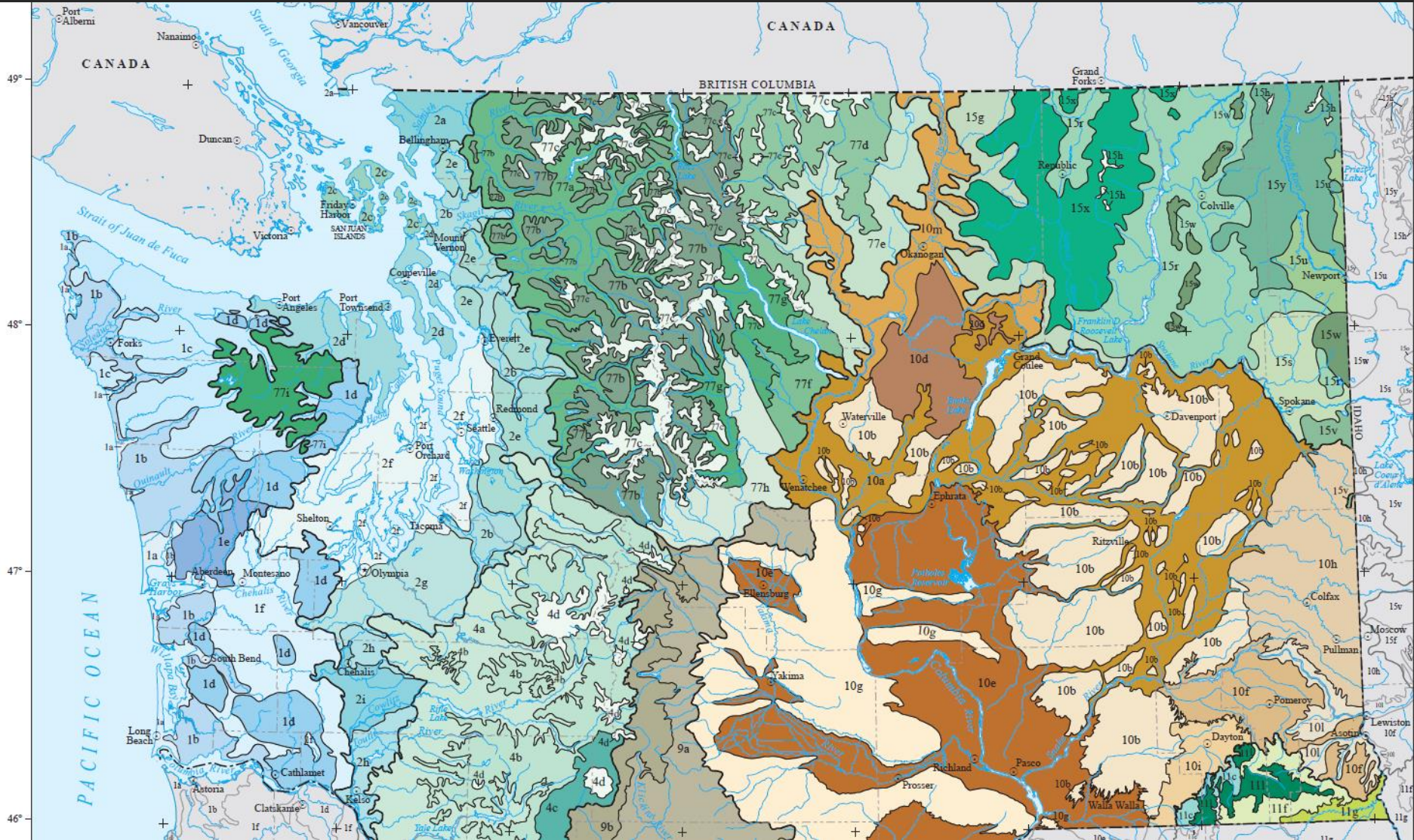
# WALKTHROUGH CONTINUED

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS





# REGIONS → SUB-REGIONS → LANDSCAPE ROOMS



# Rocky Mountains Index:



A1 - Belly River Valley  
Pg: 2 - 3

A2 - Stony Indian Pass  
Pg: 4 - 5

A3 - Waterton Lake  
Pg: 6 - 7

A4 - Brown Pass  
Pg: 8 - 9

A5 - Bowman Lake  
Pg: 10 - 11

A6 - North Fork of the  
Flathead - Pg: 12 - 13

A7 - Whitefish Range -  
Hay Creek - Pg: 14 - 15

A8 - Whitefish Divide  
Pg: 16 - 17

A9 - Whitefish Range -  
Ten Lakes Area - Pg: 18 - 19



Pacific Northwest National Scenic Trail

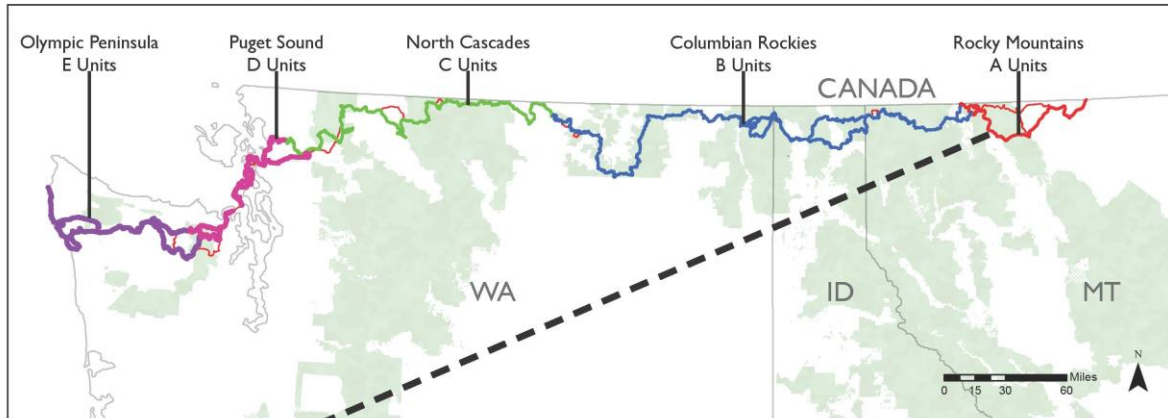


for the greatest good

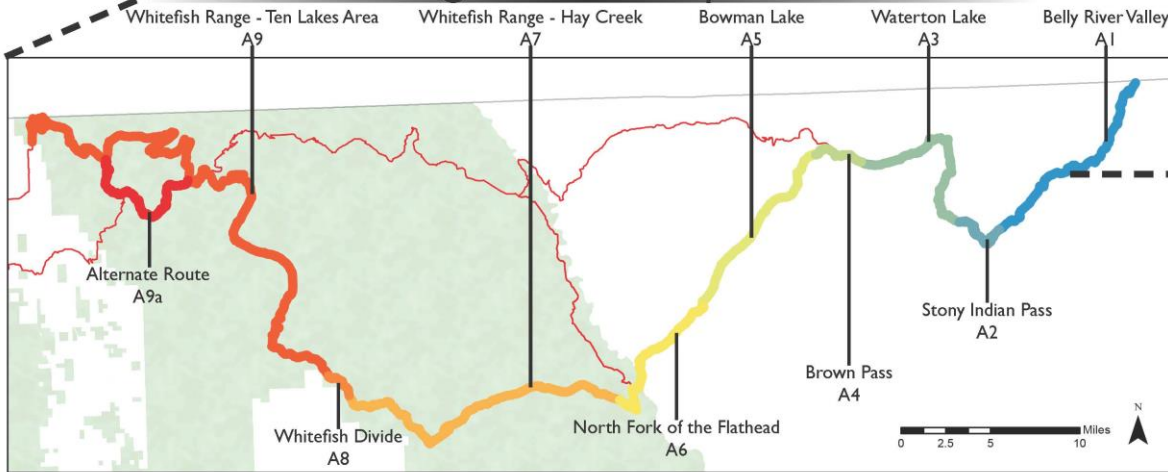


# REGIONS → VISUAL INVENTORY FORMS

## Regions



## Sub - Regions/Landscape Rooms



## Visual Inventory Form

### PNNST Visual Inventory

NUMBER: A001

Geographic Area: 15L Salish Mountain

Date: 7-6-2015

Scenic Character Unit: Near French Creek

Trailhead: Trail #12

Visual Quality / Scenic Attractiveness (Variety, Unity, Vividness, Mystery, Intactness, Coherence, Harmony, Uniqueness)		
Landform	5, 3, 1 pts	3
Vegetation	5, 3, 1 pts	1
Water	5, 3, 0 pts	3
Color	5, 3, 1 pts	3
Influence of Adjacent Scenery / Viewshed	5, 3, 0 pts	3
Scarcity	5+, 3, 1 pts	3
Cultural Modification / Sense of place (Also see Scenic Integrity)	4, 0, -4 pts	0
Score (Circle One)	A=19+ B=12-18, C=11+	A B C

### Scenic Character Description:

Vegetation:

Land Use:

Landform:

Features:

Other Comments:

Scenic Integrity		
Level of Natural Intactness	H M L	
Wholeness	H M L	
Score (Circle One)	VI I M H VH	

Visibility: (Sensitivity/Concern Level/Viewshed)

Foreground View:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Middleground View:

\_\_\_\_\_

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\_\_\_\_\_

Background View:

\_\_\_\_\_

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\_\_\_\_\_

GPS Location:

\_\_\_\_\_

Photographs:

\_\_\_\_\_



## SCENIC CHARACTER

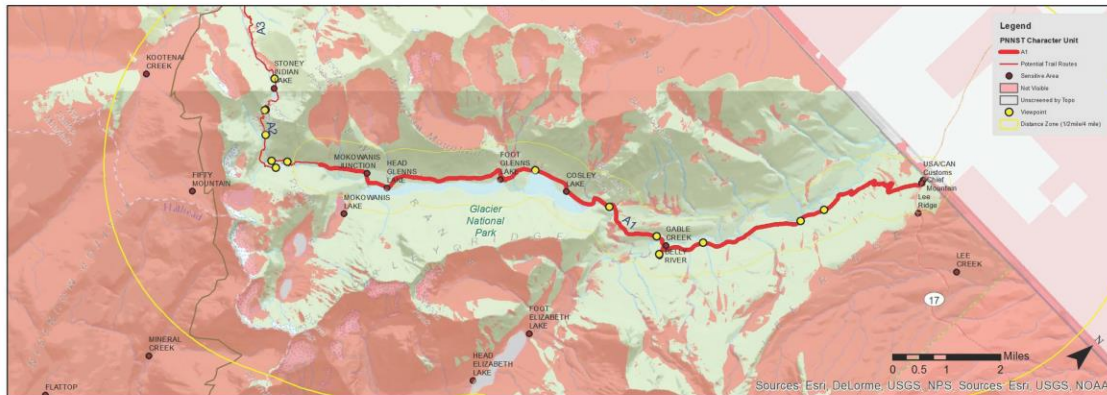
The Belly River Valley lies east of the Continental Divide in the rain shadow of the Rocky Mountains. The most eastern section of the PNNST coincides with an alternate route of the Continental Divide National Scenic Trail. The broad Belly River Valley extends into Canada cradling the north flowing river. Nestled along the Rocky Mountain Front, here the Rocky Mountains dramatically uplift from the vast prairie to the east. Open meadows intersperse with aspen groves and mixed coniferous forest. Riparian corridors carve through rolling hills. Glacially scoured Cosley and Glens Lakes display clear, azure water and are linked together by the Mokawanis River. High quality water abounds in many shades and forms. Expansive views of the surrounding Lewis Range are abundant.

Chief Mountain presides over the valley, a landscape sacred to the Blackfoot Nation. The Belly River Ranger Station stands testament to National Park Service management and the primary land use of recreation. Wildlife is abundant with most of the entire suite of species still extant, including lynx and grizzly bears. Non-native plant species, such as Timothy grass, have been introduced.

### Aerial Overview



### UNIT MAP



## VISUAL QUALITY/SCENIC ATTRACTIVENESS

	Rating	Explanation or Rationale
<b>Landform</b>	4	Dramatic, glaciated mountains and valleys of Lewis Range.
<b>Vegetation</b>	3	Mixed coniferous forest; meadow; riparian corridor; aspen groves.
<b>Water</b>	5	Abundant in many forms: river; streams; lakes high quality water.
<b>Color</b>	3	Meadow flowers; aspen; clear cerulean water.
<b>Adjacent Scenery</b>	3	Rocky, jagged mountains including iconic Chief Mountain.
<b>Scarcity</b>	5	Exceptional; national significance.
<b>Cultural Modification</b>	3	Excellent trails and campgrounds; Belly River Ranger Station and associated facilities.
<b>Total</b>	<b>26</b>	<b>RATING = A</b>

### Visual Inventory Form

Zone: 5 - Rocky Mountains  
Unit #A1 Belly River Valley

Date: 07/06/2015

Jurisdiction (s): National Park

### LOCATION MAP



### VISIBILITY

<b>Viewsheds/ Screening/ Distance Zone</b>	Views are filtered by vegetation in sections but mostly far reaching into Middleground and Background of surrounding Lewis Range.
<b>Sensitivity/ Concern Level</b>	Very high concern levels because of high use and portal access to Glacier National Park.

### SCENIC INTEGRITY

<b>Level of Naturalness</b>	Very High except introduced pasture grass
<b>Wholeness</b>	Very High



for the greatest good



PACIFIC NORTHWEST NATIONAL SCENIC TRAIL

Visual Inventory Form

Zone: 5 - Rocky Mountains  
Unit # A1 Belly River Valley

Date: 07/06/2015  
Jurisdiction (s): National Park

LOCATION MAP



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for the greatest good

ENIC TRAIL

SCENIC CHARACTER

The Belly River Valley lies east of the Continental Divide in the rain shadow of the Rocky Mountains. The most eastern section of the PNNST coincides with an alternate route of the Continental Divide National Scenic Trail. The broad Belly River Valley extends into Canada cradling the north flowing river. Nestled along the Rocky Mountain Front, here the Rocky Mountains dramatically uplift from the vast prairie to the east. Open meadows intersperse with aspen groves and mixed coniferous forest. Riparian corridors carve through rolling hills. Glacially scoured Cosley and Glens Lakes display clear, azure water and are linked together by the Mokawanis River. High quality water abounds in many shades and forms. Expansive views of the surrounding Lewis Range are abundant.

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Aerial Overview



UNIT MAP



VISUAL QUALITY/SCREENING

	Rating
Landform	4
Vegetation	3
Water	5
Color	3
Adjacent Scenery	3
Scarcity	5
Cultural Modification	3
Total	26

VISIBILITY

Viewsheds/  
Screening/  
Distance Zone

Views are filtered by vegetation in sections but mostly far reaching into Middleground and Background of surrounding Lewis Range.

Sensitivity/  
Concern  
Level

Very high concern levels because of high use and portal access to Glacier National Park.

SCENIC INTEGRITY

Level of  
Naturalness

Very High except introduced pasture grass

Wholeness

Very High



**SCENIC CHARACTER**

The Belly River Valley lies east of the Continental Divide in the rain shadow of the Rocky Mountains. The most eastern section of the PNNST coincides with an alternate route of the Continental Divide National Scenic Trail. The broad Belly River Valley extends into Canada cradling the north flowing river. Nes-

**VISUAL QUALITY/SCENIC ATTRACTIVENESS**

	Rating	Explanation or Rationale
Landform	4	Dramatic, glaciated mountains and valleys of Lewis Range

Visual Inventory Form

Zone: 5 - Rocky Mountains  
Unit # A1 Belly River Valley

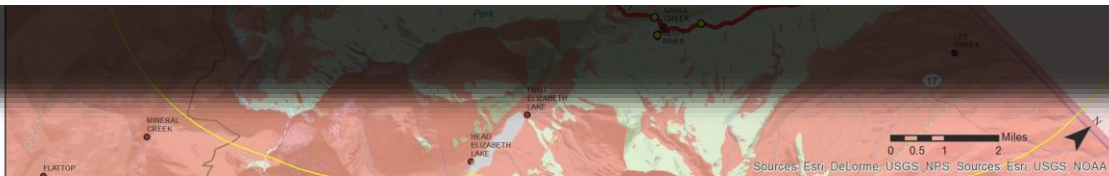
Date: 07/06/2015

**UNIT MAP**

Total

26

**RATING = A**



PACIFIC N

**Legend**

**PNNST Character Unit**

- A1
- Potential Trail Routes
- Sensitive Area
- Not Visible
- Unscreened by Topo
- Viewpoint
- Distance Zone (1/2mile/4 mile)



## SCENIC CHARACTER

The Belly River Valley lies east of the Continental Divide in the rain shadow of the Rocky Mountains. The most eastern section of the PNNST coincides with an alternate route of the Continental Divide National Scenic Trail. The broad Belly River Valley extends into Canada cradling the north flowing river. Nestled along the Rocky Mountain Front, here the Rocky Mountains dramatically uplift from the vast prairie to the east. Open meadows intersperse with aspen groves and mixed coniferous forest. Riparian corridors carve through rolling hills. Glacially scoured Cosley and Glens Lakes display clear, azure water and are linked together by the Mokawans River. High quality water abounds in many shades and forms. Expansive views of the surrounding Lewis Range are abundant.

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### Aerial Overview



### UNIT MAP



## VISUAL QUALITY

Landform	
Vegetation	
Water	
Color	
Adjacent Scenery	
Scarcity	
Cultural Modification	
Total	

## VISUAL QUALITY/SCENIC ATTRACTIVENESS

	Rating	Explanation or Rationale
<b>Landform</b>	4	Dramatic, glaciated mountains and valleys of Lewis Range.
<b>Vegetation</b>	3	Mixed coniferous forest; meadow; riparian corridor; aspen groves.
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<b>Adjacent Scenery</b>	3	Rocky, jagged mountains including iconic Chief Mountain.
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<b>Total</b>	<b>26</b>	<b>RATING = A</b>

## SCENIC CHARACTER

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### Aerial Overview



### UNIT MAP



## SCENIC CHARACTER

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### Aerial Overview



### UNIT MAP



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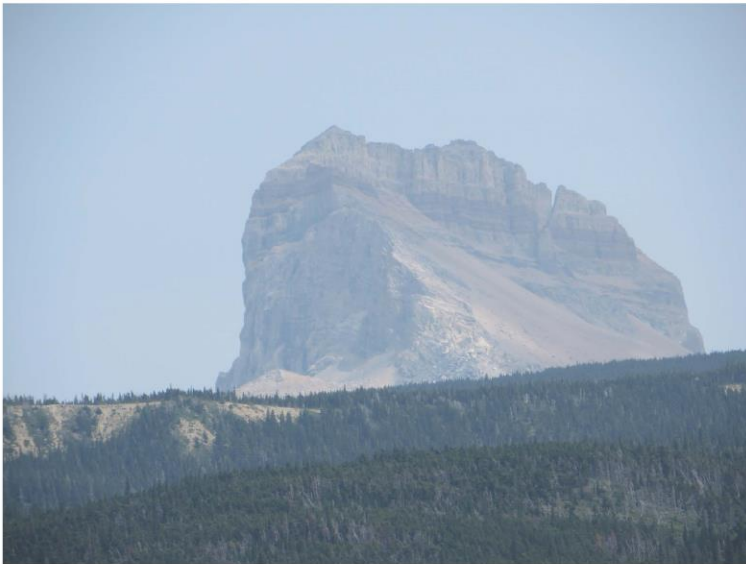
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Viewpoint - Panorama #01



Viewpoint #02



Viewpoint #03



3





## SCENIC CHARACTER

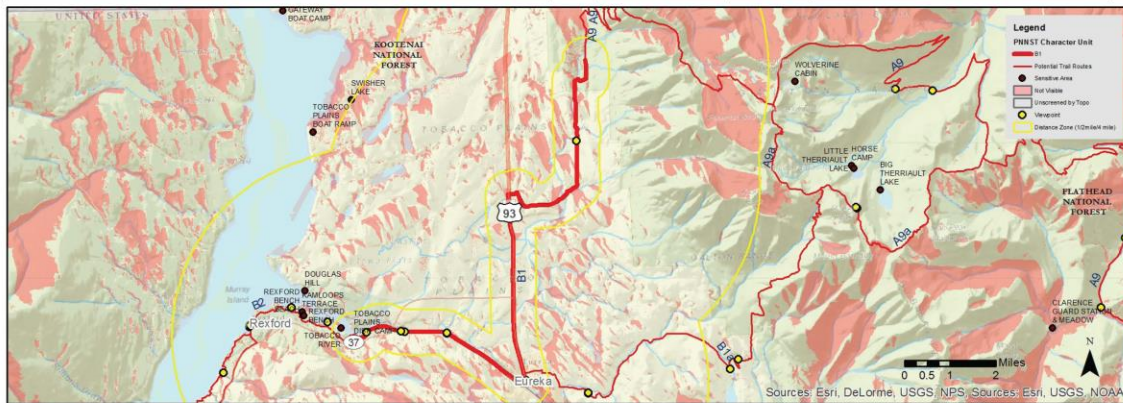
The Tobacco Plains unit is a broad valley sculpted by glaciation. Drumlins, or hills composed of glacial till, create low relief and well drained soils. The Tobacco River carves through the rolling landscape with rich riparian habitat replete with bird life. Land cover is largely treeless. Uplands, such as river terraces, supports dry, fragrant ponderosa pine forests. Pockets of aspen add to the pleasant mosaic. Suitable land has been converted to agriculture use, adding pastoral charm. Open expanses have distant views of the Whitefish and Salish Mountain ranges.

The convivial town of Eureka, a social oasis nestled in the Tobacco Plains, offers sustenance to weary travelers. Portions of the trail sample the residential and commercial fabric of this quiet community. The unit's geologic history renders it rich with sand and gravel deposits.

### Aerial Overview



### UNIT MAP



## VISUAL QUALITY/SCENIC ATTRACTIVENESS

	Rating	Explanation or Rationale
<b>Landform</b>	3	Lowland hills; alluvial terraces; river bluffs.
<b>Vegetation</b>	3	Mostly treeless; ponderosa pine; aspen; riparian corridor; agricultural fields.
<b>Water</b>	3	Tobacco river; farm ponds.
<b>Color</b>	2	Fall color of aspen and broadleaf riparian plants; agriculture.
<b>Adjacent Scenery</b>	3	Broad agricultural valley; Whitefish Range to the east; Salish Mountains to the west.
<b>Scarcity</b>	1	Common agricultural landscape.
<b>Cultural Modification</b>	2	Historic rural farm houses; historic downtown Eureka.
<b>Total</b>	<b>17</b>	<b>RATING = B</b>

### Visual Inventory Form

Zone: 4 - Columbian Rockies  
Unit # BI Tobacco Plains

Date: 07/07/2015

Jurisdiction (s): Private, US Forest Service

### LOCATION MAP



### VISIBILITY

<b>Viewsheds/ Screening/ Distance Zone</b>	Middleground views are open in the Ag land. Background is dominated by mountain ranges.
<b>Sensitivity/ Concern Level</b>	Very High concern levels because of proximity to Eureka.

### SCENIC INTEGRITY

<b>Level of Naturalness</b>	Low level because landscape is altered for the majority of the unit.
<b>Wholeness</b>	Low level because agricultural land has continuity but other land is fragmented.



Viewpoint - Panorama #01



Viewpoint #02



Viewpoint #03



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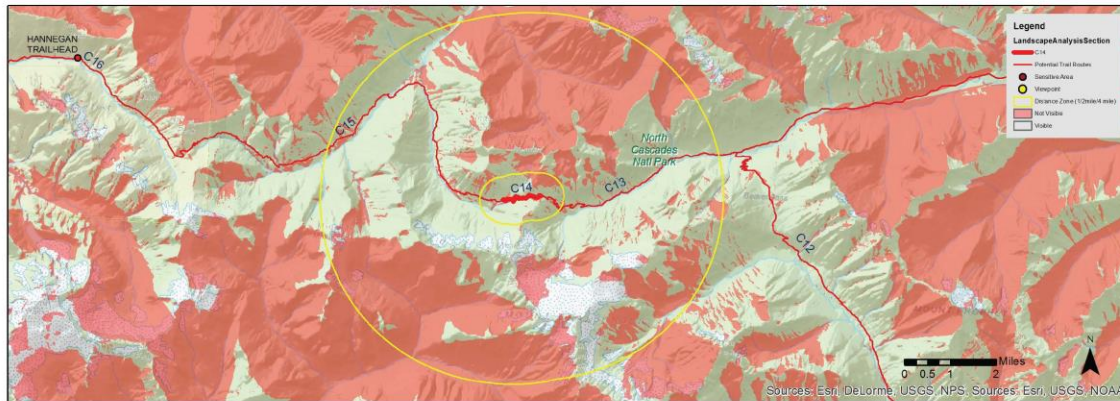
## SCENIC CHARACTER

The Whatcom Pass unit is a high elevation vista with impressive far reaching views. Jagged mountain tops abound with active glaciers. Challenger and Whatcom Glaciers are in the middleground distance zone, allowing for close observation of details, such as crevasses and blue ice. Bare mountain, polished smooth and scarred by scraping, is exposed as glaciers recede. Slopes are unstable and constantly falling apart. Avalanche chutes are frequent. Rock is abundant with granite talus and cliff bands. Hanging valleys conceal clear, shallow tarns, such as Tapto Lakes. Water falls plummet from glaciers and snowpack. Pockets of woodland are stunted with predominantly mountain hemlock. Alaska yellow cedar and silver fir pick up at forest edges. Wet seeps are fringed with Lewis's monkey flower and other conspicuous wildflowers. Meadows are short in stature with low species diversity. Low-growing shrubs with berries cover large areas of high slopes. Bears are commonly seen foraging in late summer and early fall. The windswept pass is imbued with a microclimate of plentiful precipitation and cool temperatures.

### Aerial Overview



### UNIT MAP



## VISUAL QUALITY/SCENIC ATTRACTIVENESS

	Rating	Explanation or Rationale
<b>Landform</b>	5	Mountain pass that features alpine lakes, granite and rock outcroppings as well as scree fields.
<b>Vegetation</b>	5	Landscape includes a great diversity of trees species with slight plant variety in the meadows. Blueberries are present at certain times of the year in this area.
<b>Water</b>	5	Beautiful alpine lakes and waterfalls reside in this unit and add dramatic visual character to the scenery.
<b>Color</b>	5	A beautiful mixture of greens, yellows, reds, blues, and browns play off each other simply to create a visually interesting landscape mosaic.
<b>Adjacent Scenery</b>	5	Glacier fields, mountain slopes with talus chutes or waterfalls, and/or old growth forest patches all join to create a stimulating and breathtaking scene surrounding the unit.
<b>Scarcity</b>	5	This is a visually significant and unique unit that is locally and regionally valued for its amazing landscape character.
<b>Cultural Modification</b>	0	No presence of human use activities or structures that add or detract visual interest.
<b>Total</b>	<b>30</b>	<b>RATING = A+</b>

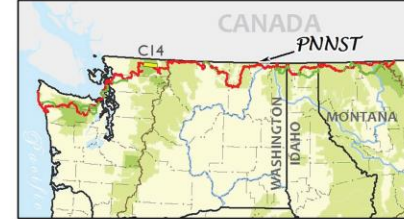
### Visual Inventory Form

Zone: 3 - North Cascades  
Unit # C14 Whatcom Pass

Date: 08/28/15

Jurisdiction (s): National Park Service

### LOCATION MAP



### VISIBILITY

<b>Viewsheds/ Screening/ Distance Zone</b>	Foreground includes old growth groves, scree fields, and glacier chutes. Middleground includes glaciers, waterfalls, and scattered tree groups. Background includes aged mountain tops.
<b>Sensitivity/ Concern Level</b>	Very High concern because of national park designation and high recreational use.

### SCENIC INTEGRITY

<b>Level of Naturalness</b>	Very High
<b>Wholeness</b>	Very High





Viewpoint - Panorama #01



Viewpoint #02



Viewpoint #03



117



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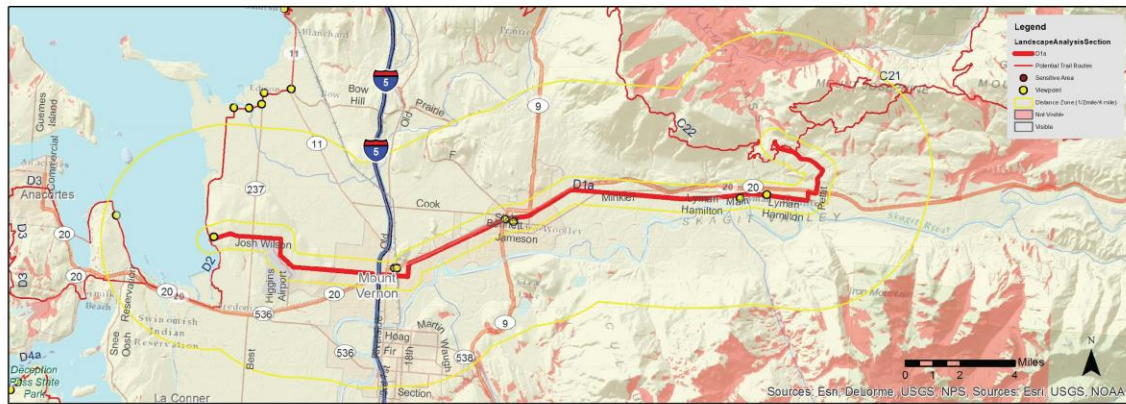
## SCENIC CHARACTER

The Skagit River Valley unit is composed of floodplains and terraces. Western red cedar forest, western hemlock forest, and both riverine and wetland habitat were common before the 19th century. Subsequently, many of the wetlands were drained. Pastures, cropland, forests, and urban centers now dominate the landscape. In sections, a re-purposed rail line is the trail platform. The trail corridor stitches together riparian area, patchwork of agriculture, residential and industrial development. The urban fabric of Sedro-Wooley and Burlington are brought into the fold. These cheerful communities provide lodging, fare, and leisure for weary travelers. Views are often screened by vegetation and other land cover. The iconic Mt Baker is looms over the area.

### Aerial Overview



### UNIT MAP



## VISUAL QUALITY/SCENIC ATTRACTIVENESS

	Rating	Explanation or Rationale
<b>Landform</b>	1	Fragmented landscape, flat valley bottom.
<b>Vegetation</b>	3	Crops, cottonwoods line irrigation ditches.
<b>Water</b>	2	Irrigation ditches.
<b>Color</b>	3	Fall color, green agricultural land.
<b>Adjacent Scenery</b>	2	Hillsides of conifers.
<b>Scarcity</b>	1	Typical rural landscape.
<b>Cultural Modification</b>	2	Rail-to-trails and small towns of Hamilton, Lyman, Sedro-Wooley, and Burlington add to the uniqueness of the area, but portions of the built environment detract as well.
<b>Total</b>	<b>14</b>	<b>RATING = B-</b>

### Visual Inventory Form

Zone: 2 - Puget Sound  
Unit # D1a Skagit River Valley

Date: 08/27/15  
Jurisdiction (s): Private

### LOCATION MAP



### VISIBILITY

<b>Viewsheds/ Screening/ Distance Zone</b>	Views are limited by screening of adjacent vegetation and built structures, but do open up in a few areas.
<b>Sensitivity/ Concern Level</b>	High concern because the the high use and population density.

### SCENIC INTEGRITY

<b>Level of Naturalness</b>	Low levels of naturalness.
<b>Wholeness</b>	Fragmented landscape, low.





Viewpoint #01



Viewpoint #02



Viewpoint #03



Viewpoint #04



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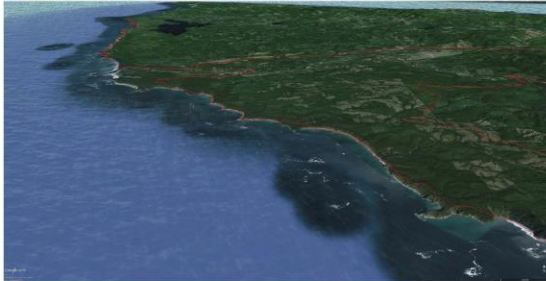


## SCENIC CHARACTER

The Pacific Coast unit is the abrupt transition of mixed coniferous forest to coast. Forest is predominantly shore pine and Sitka spruce. Marsh occupies estuary areas. Grass and other pioneers stabilize beach terraces. Headlands make travel dangerous, and tides dictate opportunities. Beach is diverse with a range of substrates, including sand and basalt cobble. Pounding surf is an incessant and visceral force. Tide pools teem with colorful sea creatures. Ocean is dynamic and in perpetual motion. Sea stacks, vertical towers of rock, protrude from ocean. Salt laden wind and precipitation are common. Life is abundant and revolves around the rhythms of tide. Kelp and marine detritus collect in mats that swarm with insects and decomposers. Shore birds flock on tidal flats and cling to sea stacks. Sea otters and other marine mammals comb surf and bask on protected beaches.

Trail traverses the ecotone for prolonged experiences in solitude. Communities of people have long inhabited this productive coast and revere it as sacred ground. National Park Service designation speaks to its modern significance.

### Aerial Overview



### UNIT MAP



## VISUAL QUALITY/SCENIC ATTRACTIVENESS

	Rating	Explanation or Rationale
<b>Landform</b>	5	Dramatic views of coastal tidal pools, sea stacks, sand and rock beaches.
<b>Vegetation</b>	5	Thick rain forest vegetation.: ferns, fungi, coastal conifers, kelp, salt grasses, and mosses.
<b>Water</b>	5	Pacific Ocean. Rolling waves and moving tides.
<b>Color</b>	3	Rock outcrops exuding browns against the blue water. Green ferns and colorful l fungi.
<b>Adjacent Scenery</b>	5	Distant sea stacks and shoreline add to the visual integrity.
<b>Scarcity</b>	5	Amazing views of the ocean shoreline.
<b>Cultural Modification</b>	5	Native American heritage and cultural features are positive elements. Some built elements take away.
<b>Total</b>	<b>33</b>	<b>RATING = A+</b>

### Visual Inventory Form

Zone: I - Olympic Peninsula  
 Unit # E8 Pacific Coast

Date: 09/02/15

Jurisdiction (s): National Park

### LOCATION MAP



### VISIBILITY

<b>Viewsheds/ Screening/ Distance Zone</b>	Views are open along the seashore but as you move inland, vies are limited to the immediate foreground.
<b>Sensitivity/ Concern Level</b>	Very high concern levels along this section of trail because of the high use and portal access to the Cascades National Park.

### SCENIC INTEGRITY

<b>Level of Naturalness</b>	Landscape is natural appearing along the undeveloped coastline, but has very low scenic integrity along developed sections.
<b>Wholeness</b>	Strong sense of intactness along most of the trail except in a few developed portions where there are a loss of continuity.



for the greatest good

Viewpoint #01



Viewpoint #02



Viewpoint #03



Viewpoint #04



175



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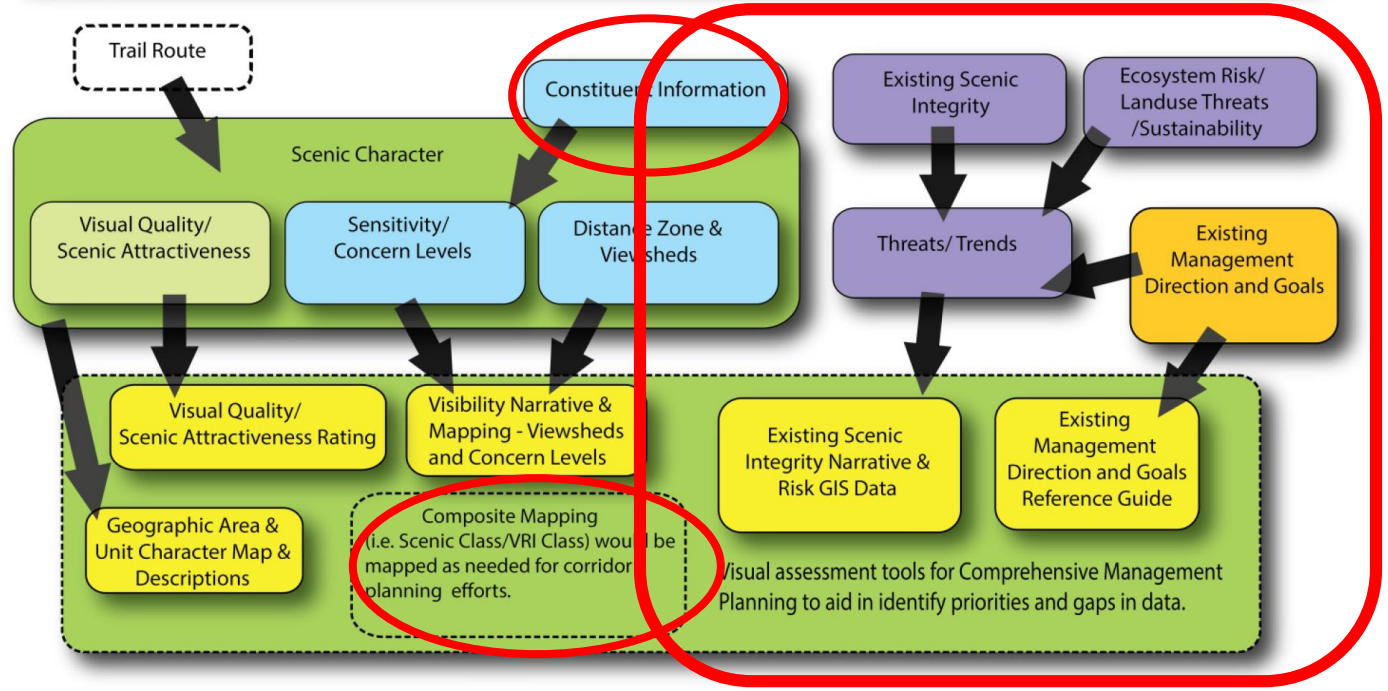


# NEXT STEPS



# WHAT'S NEXT?

## PACIFIC NORTHWEST NATIONAL SCENIC TRAIL SCENIC INVENTORY PROCESS



## Comprehensive Plan

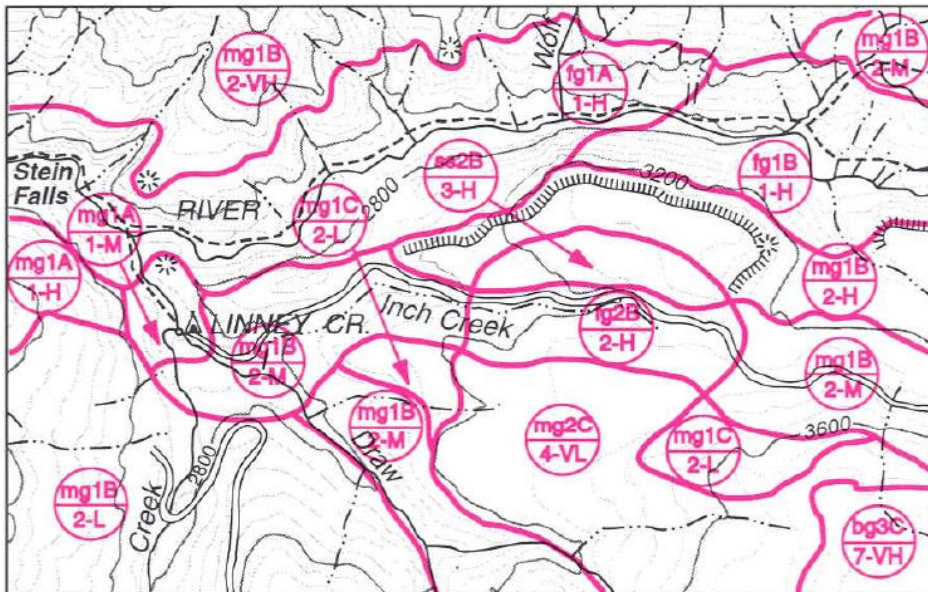
## Scenic Class

*Relative Scenery Importance, 1 to 7 scale*

Table 4—2. Scenic Class Matrix

		Distance Zones/Seldom-Seen & Concern Levels											
		fg1	mg1	bg1	fg2	mg2	bg2	fg3	mg3	bg3	ss1	ss2	ss3
Scenic Attractiveness	A	1	1	1	2	2	2	2	3	3	1	2	3
	B	1	2	2	2	3	4	3	5	5	2	3	5
	C	1	2	3	2	4	5	5	6	7	3	5	7

Figure 4 - 4. Sample Scenery Inventory Final Map



Based on

- Attractiveness
- Public Concern Level
- Viewing Distance/Visibility

**Scenic Class Map**

# Quantification, Synthesis, Analysis

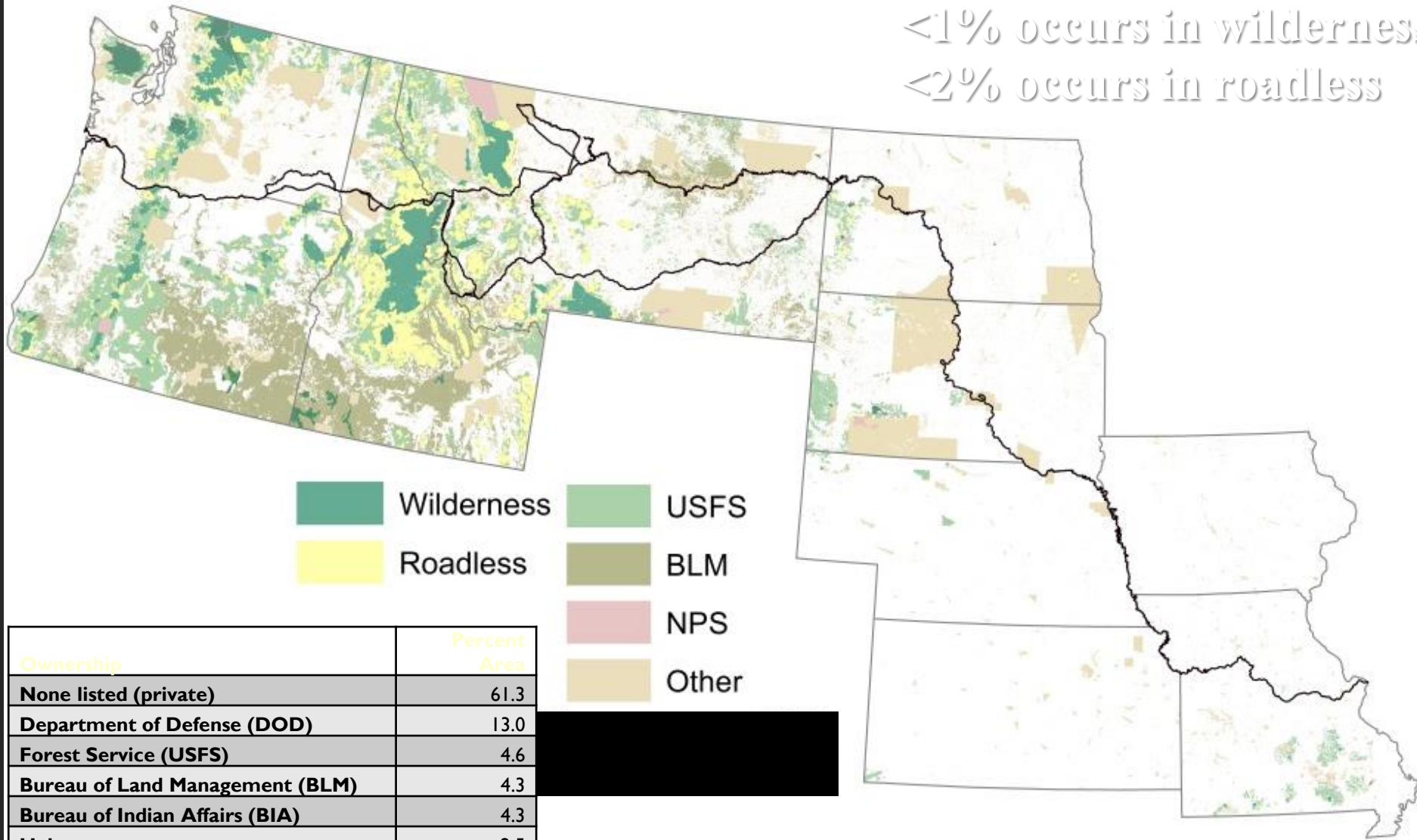
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- ▶ Scenic Quality (% A/B/C)
- ▶ Sensitivity (% H/M/L)
- ▶ Existing Scenic Integrity (% VH, H, M, L, VL)
- ▶ SCENIC CLASSES~ relative scenic importance (DESIRED FC)
  
- ▶ Land Jurisdiction (% federal/ state/ private/ other)
  - ▶ Federal: NPS/FS/BLM/FWS etc.
  - ▶ Private: Small/Large/ Corporate
- ▶ Level of Protection
  - ▶ Designation- (Wilderness, WSR, or not ...)
  - ▶ Conservation Easements (agr/scenic...)
  - ▶ Other projection (hillside, historic overlay... )



# How much of the Trail occurs on federally protected land?

<1% occurs in wilderness  
 <2% occurs in roadless



- Wilderness
- Roadless
- USFS
- BLM
- NPS
- Other

Ownership	Percent Area
None listed (private)	61.3
Department of Defense (DOD)	13.0
Forest Service (USFS)	4.6
Bureau of Land Management (BLM)	4.3
Bureau of Indian Affairs (BIA)	4.3
Unknown	2.5
State Department of Natural Resources	2.0
State Fish and Wildlife	1.4
Native American Land	1.3
Fish and Wildlife Service (FWS)	1.2

# COMP. PLAN (ACTION PLAN)

---

## ▶ Prioritization of Lands for Protection

### ▶ Forest Planning

- ▶ Geographic Areas & Overlay Mgt. Area & Corridor

### ▶ Land Acquisition, Conservation Easements, Voluntary Measures

### ▶ MANY APPROACHES..

- ▶ ILARIS (Puget Sound TPL Greenprint)

- ▶ Visual Prioritization Process (AZ Trail using)

## ▶ Compensatory Mitigation:

- ▶ Information can help with identifying areas that might be targeted for scenic restoration, enhancement as offset for unavoidable impacts from nearby projects as part of a compensatory mitigation.

# LESSONS LEARNED

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- Benefits of Hybrid System
- Importance of Actual FIELD BASED Inventory
- Information for Future Route Alternatives
- Tap into Experience of Nomadic ‘PERPETUAL HIKERS’





*in memoriam*