

Appendix D

Reply to: 2350

Date: February 26, 1992

Subject: Transmittal of Procedure for Analyzing Proposed Water Resources
Projects Affecting Wild and Scenic Rivers

To: Forest Supervisors and CRGNSA Manager

Enclosed is a procedure paper developed by Recreation and Fisheries staff, and other resource experts, for analyzing proposed water resources projects that might have an effect on Wild and Scenic Rivers (W&SR's). This procedure provides a framework for evaluating the potential "direct and adverse effects" associated with a proposed water resources project as required by Section 7 of the Act. It may be applied to designated rivers, those identified for study by Congress, and to rivers identified as potential W&SR's in the land management planning process.

This procedure was developed as a response to the significant increase in the number of water resources projects proposed for designated and potential W&SR's and the need to standardize the process to provide both rigor and consistency of analysis. The lack of a standardized analysis procedure is contributing to the difficulty of making adequate Section 7, water resources project determinations on a case-by-case basis. This situation affects the administration of designated rivers and has the potential to affect future river designations.

As this procedure is in the evaluative stages, it is essential that a number of Forests with projects in designated or potential W&SR's help test and evaluate its application. Therefore, we are asking you to identify proposed projects that would allow us to evaluate the procedure. The Region will select four to six projects to assure evaluation of a range of both type (fisheries, watershed, engineering, etc.) and magnitude (spatial and temporal). The Director of Recreation will be responsible for coordination of this evaluation process and secure involvement of appropriate Regional Office specialists.

In addition, you are encouraged to expand our evaluation data base by applying this procedure to all proposed water resources projects associated with W&SR's on your Forest. For water resources projects that are analyzed per this procedure but are not part of the formal Regional review, please provide the information displayed in Enclosure 2. It is very important to collect the cost of completing this analysis procedure.

Forest Supervisors and CRGNSA Manager

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If you have a proposed water resources project for which you might apply the draft Regional procedure, please contact Jackie Diedrich (J.Diedrich:R06C; FTS 423-3644; 503-326-3644). We will evaluate the results of this field test in the fall of 1992.

/s/ John E. Lowe (for)

JOHN F. BUTRUILLE
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Enclosures

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Enclosure 1
USDA Forest Service, Region 6
Procedure for Analyzing Proposed Water Resources Projects
Affecting Wild and Scenic Rivers (1/15/92)

I. Introduction

This paper establishes a procedure for the evaluation of water resources projects that might have an effect on designated Wild and Scenic Rivers (W&SR's). Under Section 7(a) of the W&SR's Act, an administering agency must determine whether the proposed water resources project has a "direct and adverse effect on the values for which such river was established." To make this determination, an analysis of how the proposed project might affect free-flow, water quality, the outstandingly remarkable, and other significant river-related values must be completed.

This procedure also applies to congressionally identified study rivers (Section "5a" rivers), which are afforded interim protection from water resources projects via Section 7(b) of the Act. Although not protected from water resources projects via the W&SR's Act, rivers identified for study through the land management planning process (Section "5d" rivers) are afforded protection via agency policy.

(For a more detailed explanation of Section 7 including a summary of relevant issues, please refer to the appendix.)

II. Procedure

A. Background

A variety of resource experts have helped to develop this procedure for evaluation of water resources projects. From the discussions that lead to development of this paper, resulted a number of key ideas:

The majority of the rivers in the northwest have been appreciably altered and often water quality and fish habitat are in deteriorated condition. Historical studies suggest that splash damming, removal of large log jams and large woody debris, channelizing, etc. have observably affected many of our river systems.

It is necessary to provide a temporal and spatial context for restoration activities and other river related proposals (recreation development, transportation planning, private land practices, etc.). Therefore, as a result of W&SR management planning, desired future conditions (DFC's) should be established addressing free-flow, water quality, the outstandingly remarkable, and appropriate significant river-related values. The DFC's should address historical conditions and describe desired future condition in relation to the riparian zone and floodplain. Thus, the DFC's establish long term management goals.

Section 7 and promulgating rules (36 CFR 297) require an analysis of the direct and adverse effects associated with a proposed water resources project. The scope of this analysis should be in a broad enough context to account for the interaction of river-related values and at a level commensurate with the project. The outcome of the analysis should clearly demonstrate consistency with achieving the DFC's.

Management of the river ecosystem should be designed to achieve the DFC's through intelligent use of existing, natural processes and technology that mimics those processes over the long run. To insure long term goals and objectives are met, careful analysis and evaluation of these processes, time scales, and public perceptions must be adequately considered. Where accelerated restoration is deemed desirable, proven technology and techniques must be used.

B. Step-by-Step Procedure

A step-by-step process to evaluate proposed water resources projects within a W&SR ecosystem has been developed. The first step is to define the need for the proposed activity. Next there should be a determination that the proposed activity is consistent with the DFC's for the river ^{1/}. If the activity does not evidence a compelling need or is inconsistent with the DFC's, the project may not be considered further.

For necessary projects that appear consistent with the DFC's, utilize the following procedure. The scope of the analysis should be commensurate with the magnitude and complexity of the project proposal. In addition, the procedure should be accomplished via an interdisciplinary team with adequate skills for the analysis. Note that each step requires some professional judgement.

Please note, this procedure is not simply one of disclosure. Rather, it is a framework to evaluate the "direct and adverse effects" associated with a particular water resources project. The W&SR's Act states in Section 1(b) that one of the reasons rivers are added to the national system is preserve their free-flowing condition.

1. **Define the proposed activity.** Provide objective description (scope of description is a function of the scope of the project) and indicate whether project is isolated or continuing (i.e., part of a more complex/comprehensive proposal).

- a. purpose (clearly describe the exceptional need for the project)
- b. location
- c. duration
- d. magnitude/extent
- e. relationship to past management

1/ If the DFC's for a particular river have not been formalized through a river planning process, utilize the DFC's, management area standards and guidelines in the Forest Plan to develop.

2. Describe how proposed project/activities directly alter on-site conditions (identify outstandingly remarkable and other significant river-related values). Objective.

- a. What is the position of activity; i.e., within bed, bank, riparian zone or uplands?
- b. Does planned activity result in:
 1. redirection, realignment, or change in the course of the active (or bank full*) channel?
* bank full - portion of channel inundated on average one to several times per year as defined by a clear topographic break or change in vegetation
 2. modification of channel geometry (width or depth), channel slope (gradient), or channel planform* (straight, meandering, or braided)?
* planform - the contour of an object as viewed from above
- c. Does planned activity alter streamside vegetation?

3. Evaluate how changes in on-site conditions can/will alter existing river processes. Evaluate by quantifying, qualifying and modelling as appropriate. Relate this discussion to potential changes described in Step 2.

- a. Does planned activity affect:
 1. ability of channel to change course, reoccupy former segments, or inundate its floodplain?
 2. streambank erosion potential; sediment routing and deposition; debris loading?
 3. surface and subsurface flows?
 4. hydro period?
 5. flood storage (detention storage)?
 6. aggradation/degradation of channel?
 7. reproduction, growth and/or succession of streamside vegetation?
 8. biological processes (e.g., spawning/rearing habitat, waterfowl needs, amphibian/mollusk needs, etc.)?
- b. Does planned activity result in reduction, augmentation, or otherwise change the timing of flow in channel?

4. Estimate the magnitude and spatial extent of potential off-site changes. Evaluative. Address off-site potentialities, acknowledging uncertainties (i.e., a risk analysis).

- a. Consider:
 1. changes that influence other parts of the river system.
 2. range of circumstances under which off-site changes might occur (e.g., relate to flow frequency).
 3. probability/likelihood that predicted changes will be realized.
- b. Specify processes involved, such as water, sediment, movement of nutrients, etc.

5. Define the time scale over which steps 2, 3, and 4 are likely to occur. Evaluative.
 - a. Review steps 2, 3, and 4 looking independently at element of time.
 - b. Consider whether conditions, processes and effect are temporary or persistent; i.e., attempt to define the time scale over which effects will occur.
6. Compare project analyses to DFC's. Objective. This step provides the context for Step 7.
 - Consider the time frame and planned progress toward DFC's.
7. Identify and evaluate potential adverse consequences. Weighting process considering free-flow, water quality, outstandingly remarkable, and other significant river-related values.
8. Include the Section 7 determination as part of broader NEPA analysis. (See Section VI.)

III. Section 7 and NEPA Process

The CFR states:

"The determination of the effects of a proposed water resources project shall be made in compliance with NEPA."

The following discussion offers more specific information regarding incorporation of the Section 7 procedure into the NEPA process. It also includes information relating to the decision document and the responsible official.

A potential water resources project may be either an independent project such as a proposal for watershed or fisheries enhancement project, boat ramp, fishing pier, etc., or part of a larger proposed project such as the construction/reconstruction of portions of a road system. In either situation, the Section 7 procedure is completed as a separate analysis by an interdisciplinary team. For designated rivers (Section 3a) and congressionally identified study rivers (Section 5d), the Section 7 procedure would be an appendix to the NEPA document with appropriate reference in the NEPA analysis. Similarly, for rivers identified for study via the land management planning process (Section 5d), an analysis as to the potential effect of a proposed water resources project on free-flow and the outstandingly remarkable values should be appended or available in the analysis file.

The decision document will describe the Section 7 determination for the preferred alternative for a designated or congressionally identified study river. This determination should state whether the proposed water resources project does or does not have a "direct and adverse effect on the values for which the river was designated" (or might be added to the System).

For study rivers identified via the land management planning process ("5d"), utilize the Section 7 procedure with the decision document referencing that an analysis was conducted to evaluate the potential effect of the proposed project on free-flow and the outstandingly remarkable values. (Note, that Section 7 is not required for a 5d river. However, agency policy (FSH 1909.12 8.12) provides direction to protect the free-flowing condition and outstandingly remarkable values.)

The responsible official varies with the status of the river and whether or not another federal agency is involved. For proposed water resources projects on a 3a or 5a river, in which there is another federal agency "assisting by loan, grant, license or otherwise...", the Regional Forester is the responsible official (reference 2354.04e). If there is no other federal agency "assistance" for a project on a 3a or 5a river, the appropriate line officer may sign the decision document. Decision documents for water resources projects on a 5d river may be signed by the appropriate line officer.

IV. Summary

This procedure was developed to analyze those projects that have the potential to affect the free-flowing condition of designated and study W&SR's. The scope of the analysis will vary with the magnitude and complexity of the proposed activity. Importantly, this procedure is not designed to result in a yes/no answer. Rather, it requires application of professional judgement within the requirements of the Act.

Examples of projects that would likely be subject to Section 7 analysis include, but are not limited to:

1. Log removal for recreation user safety;
2. Fisheries habitat and watershed enhancement projects;
3. Bridge and other roadway construction/reconstruction projects;
4. Bank stabilization projects;
5. Recreation facilities such as boat ramps, fishing piers, etc.;
6. Activities that require 404 permit from Corps of Engineers.

V. Example of Application of R-6 Section 7 Procedure

To be developed.

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Appendix

I. References

The Wild and Scenic Rivers Act of 1968 defined the policy of the US:

...that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing^{1/} condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the US needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes. Section 1(b)

Further, expression of the intent of the Act is stated in Section 10(a):

Each component of the national W&SR system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public uses and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on special attributes of the area.

1/ Free-flow, as addressed in the policy statement, is defined in Section 16(b):

"Free-flowing," as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national Wild and Scenic Rivers (W&SR) system, shall not automatically bar its consideration for such inclusion: PROVIDED, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national W&SR system."

Section 7 provides specific protection of designated and congressionally identified study rivers by prohibiting the licensing "of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act." Additionally, this section states:

... and no department or agency of the US shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration.

"Water resources projects" have been defined in 36 CFR 297 as:

...any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, or other construction of developments which would affect the free-flowing characteristics of a W&SR or Study River.

These regulations (36 CFR 297) require that a determination of the direct and adverse effects of a proposed project be completed through the NEPA process.

The responsible official for the evaluation of a water resources development project is defined in the Forest Service Manual (2354.04e):

Regional Foresters shall: Determine the direct and adverse effects of water resource projects upon designated or study wild and scenic rivers, and determine, pursuant to section 7 of the Wild and Scenic Rivers Act, whether the Department of Agriculture will consent to a proposed action (36 CFR 297). This authority shall not be redelegated. Send decisions regarding hydroelectric project to the Washington Office Director of Lands for forwarding to the Federal Energy Regulatory Commission (follow the review and routing procedures of FSH 2709.15, section 54.72).

This direction is interpreted to apply to proposed water resources project on designated rivers (Section 3(a)) and congressionally identified study rivers (Section 5(a)) in which there is involvement of another federal agency. The authority of the Regional Forester to complete an analysis per Section 7 cannot be redelegated when the proposed water resources project requires Departmental consent.

Specific to rivers identified as potential W&SR's per the Land Management Planning process (Section 5(d)), the Forest Service Planning Handbook (1909.12, Chapter 8.12) provides agency direction related to free-flow:

"To the extent the Forest Service is authorized under law to control stream impoundments and diversions, the free-flowing characteristics of the identified river cannot be modified. Outstandingly remarkable values of the identified river area must be protected and, to the extent practicable, enhanced."

II. Issues

There are a number of issues resulting from interpretation and application of Section 7 of the W&SR's Act. These issues are:

1. the scope of "water resources projects" subject to Section 7 is not clearly defined;

Discussion - There are differing definitions of a water resources project. This has resulted in inconsistent application of Section 7 within and between administering agencies (FS, BLM, NPS, USFWS).

2. there is no standardized analysis procedure to determine if a proposed water resources project has a "direct and adverse effect";

Discussion - Lack of a standardized analysis procedure has contributed to the difficulty of making an adequate case-by-case analysis of projects as required by Section 7.

3. the administering agencies have not developed a "philosophy" as to what constitutes an affect to free-flow;

Discussion - The important question to be answered is whether or not the Act can be read to imply a weighting of river values against a strictly interpreted affect to free-flow. In addition, how should private property rights be evaluated under the direct and adverse test?

4. failure to develop a consistent and uniform policy will affect future W&SR designations and makes the management of existing designated rivers extremely difficult.

Discussion - Without a consistent national policy, internal and external questions as to the types of projects that might occur in W&SR's cannot be answered. This will limit the number and type of rivers considered for potential addition to the System (particularly in areas where there is need for fisheries and watershed enhancement as a result of past management practices).

Enclosure 2
Section 7 Analysis Procedure
Field Test Evaluation Criteria

To help in the evaluation of the Section 7 analysis procedure, please record and submit the following information:

1. Interdisciplinary team members
2. Person-days for evaluation (by specialty)
3. Cost (salary plus any related field travel)
4. Describe: problems encountered in application of procedure
 positive aspects of application of procedure
5. Would you use this procedure in the future?
6. How might the procedure be improved?