



Independent Scientific Review Panel
for the Northwest Power & Conservation Council
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MEMORANDUM

January 10, 2005

TO: Doug Marker, Fish and Wildlife Division Director, Northwest Power and Conservation Council

FROM: Rick Williams, ISRP Chair

SUBJECT: Review of Criteria and Checklist for Evaluating Proposals to Secure Riparian Easements to Protect Tributary Habitat (ISRP 2005-1)

At the Council's December 2004 request, the ISRP with the assistance of ISAB members reviewed the draft criteria and checklist for evaluating proposals to secure riparian easements to protect tributary habitat. The National Fish and Wildlife Foundation (NFWF), Pacific Northwest Regional Office, will use these criteria and checklist to select projects for implementation through the Columbia Basin Water Transactions Program funded by the Bonneville Power Administration. This riparian protection effort is an expansion of the Water Transactions Program that for the past two years has focused on innovative water transactions to increase tributary flows in the Columbia River Basin. The ISRP participated in the review and development of the water transactions criteria. At the conclusion of that review process, the ISRP was satisfied that the criteria requested the necessary information to scientifically review and prioritize water transaction proposals (see ISRP reports 2004-2, 2003-1, and 2002-15).

The process for selecting the riparian protection projects will be the same as the water transaction process. That is, NFWF receives, evaluates, and ranks proposals submitted by qualified local entities using the criteria reviewed by the ISRP; obtains BPA approval on selected projects; and facilitates the implementation of those BPA approved projects. Consequently, the ISRP's role in reviewing the criteria is important because NFWF, not the ISRP, evaluates proposals. Given this absence of ISRP proposal review, the riparian protection criteria need to be inclusive of and consistent with the criteria from the 1996 Amendment to the Power Act, which directs the ISRP to review projects in the context of the Council's program and in regard to whether they:

1. are based on sound science principles;
2. benefit fish and wildlife;
3. have clearly defined objectives and outcomes; and
4. have provisions for monitoring and evaluation of results.

The ISRP believes that the riparian protection criteria and checklist with the revisions recommended below should satisfactorily incorporate the 1996 Amendment criteria and

solicit the necessary information to scientifically review and prioritize proposals. However, the ISRP would like to conduct a quick review of the next iteration of the criteria after Bonneville and the Council have considered and incorporated the ISRP's suggested changes.

The ISRP recommends that the criteria be condensed and reorganized. There is still a lot of redundancy in the list. The idea should be to assess qualification with the minimum set of questions. The ISRP also recommends a different approach to the monitoring criteria that deserves discussion between Council and Bonneville staff. The ISRP doesn't think it is necessary, or even desirable, given the limited monitoring dollars available, to implement a monitoring effort that attempts to quantify benefits to fish and wildlife for every riparian easement that is funded. Such a monitoring effort isn't likely what the criteria drafters envisioned, so the ISRP offers revisions that would make the criteria more workable and in line with regional thinking yet still consistent with the 1996 Amendment criteria for "provisions for monitoring and evaluation."

First, the ISRP recommends that criteria be changed to require that the proposal describe provisions for minimum required monitoring consisting of archived photographs at "photopoints" and a commitment to provide updated images at intervals of two to five years. The photos would be a very easy, yet effective, way to demonstrate that the terms of the easement agreement are being met and would help keep the landowner engaged in following the recovery of the area in question. Digital images can be easily archived. Second, the proposal should show a knowledge of and cooperation/coordination with regional State/Tribal or other monitoring efforts such as the Pacific Northwest Aquatic Monitoring Partnership. To ensure future coordination and cooperation with large-scale regional efforts, provisions should be included for access to the property for sampling when and where necessary, and to information on what was done where, when, and how. Any data collection effort on the property should be done consistent with regionally agreed upon protocol. Making commitments to participate/cooperate at the formation stage should facilitate larger coordinated monitoring.

Another ISRP concern with the draft criteria and checklist is the apparent lack of attention to benefits for terrestrial wildlife and resident fish, both ESA listed and non-listed species. The ISRP understands the riparian protection program is to be tested initially at a pilot scale in areas with ESA listed anadromous salmonids with an emphasis on the Upper Columbia. However, a clear rationale is not provided to set the priority of ESA resident fish or wildlife affected by the hydropower system below the priority of ESA anadromous fish or to limit the program to the range of anadromous fish, although this appears to be related to the Action Agencies' Updated Proposed Action and the 2004 BiOp. There are obvious benefits of the program to resident fish and wildlife in the area occupied by ESA anadromous fish that should be recognized at the pilot scale. These benefits should be further emphasized if the program moves to broader application.

As requested in an earlier memo, the ISRP would like to be briefed on the Council, BPA, NOAA, and NFWF's impressions of the Water Transactions Program, the use of the criteria after two years of implementation, and how effective the program appears to be in

restoring continuous flow to streams, especially in dry years. Such a briefing would help the ISRP better understand the ability of potential participants to propose projects; i.e., whether the process and criteria are so onerous as to discourage participation. The ISRP recognizes that many of the criteria in both the water transactions and riparian protection require some detailed hydrologic and biologic knowledge. Although the Qualified Local Entities or NFWF may provide the needed technical support, the ISRP suggests that the criteria list may be more helpful to the applicant if it provides sources for some of the information sought (e.g., where does one get the GPS coordinates or the HUC number?). This might be done in an instruction sheet or some such appendix, or footnotes. Making the form easy to use ought to be a priority.

Specific ISRP comments on the criteria are provided below in [\[square brackets and blue font\]](#).

Columbia Basin Water Transactions Program
Criteria for Evaluating Proposals to Secure Riparian Easements

Goal: The goal ~~for~~ [of] this component of the program is to secure permanent riparian easements and increase riparian protection for the primary benefit of ESA listed fish and other depressed fish stocks consistent with the NOAA Fisheries Biological Opinion [of 2004?] and ~~Implementation Provision A.8 of~~ the Council's Fish and Wildlife Program [(Implementation Provision A.8)]. Under the pilot stages of the easement initiative, proposals that achieve BiOp metrics goals (i.e. 12 miles of protection for Upper Columbia Steelhead) for anadromous fish will be given priority. [NOTE: The previous sentence needs more explanation and detail.] The geographic scope of the pilot stages of the easement initiative is the range of anadromous fish in the Columbia Basin. [NOTE: See comment in the body of the memo regarding setting priority for ESA anadromous fish over other ESA listed and non-listed resident fish and wildlife species.]

The National Fish and Wildlife Foundation (NFWF), the regional entity for the Columbia Basin Water Transactions Program (CBWTP), will evaluate and recommend riparian easement proposals for funding by BPA based on the extent to which the proposals submitted by the Qualified Local Entities (QLEs) satisfy the following criteria.

To be considered and qualify for potential funding, a proposal ~~need not meet all of the criteria, but~~ must satisfy ~~at least~~ the ~~accountability and administrative~~ criteria described below. [NOTE: If these criteria are to be consistent with the 1996 Amendment Criteria, the proposal must satisfy the biological and monitoring criteria as well.]

1. The proposal satisfies the following accountability criteria:
 - The QLE has arranged to provide the necessary documentation including the riparian easement transaction checklist, NEPA checklist, preliminary appraisal, hazardous materials assessment, landowner contract, easement holder contract, and recording of easement on deed.
 - The QLE agrees to update the riparian easement transaction checklist and forward a final version of documents to NFWF upon implementation of the proposal.
2. The proposal satisfies the following administrative components:
 - The riparian easement to be secured will be a valid and verifiable property interest, and will secure protection that would not be obtained by enforcing existing laws and regulations.
 - Property owner and easement holder agreements are signed or the steps to completion are manageable and timely such that signed agreement is expected within the current fiscal year.
 - The easement has been recorded on the deed or a plan is in effect to ensure the easement is obtained in accordance with the applicable real property regulations.

- The entity holding the easement has experience in overseeing and enforcing conservation easements and the easement has established clear enforcement mechanisms and responsibilities to provide ecological protection.
3. The proposal satisfies as many of the following ecological ~~[/biological]~~ components as possible: ~~[NOTE: Is the “as many as possible” wording workable? How would it be interpreted; e.g., what would determine meeting vs. failing the criterion?]~~
- The proposal will secure riparian protection at a location where such actions will address one or more limiting factors ~~[as identified in Subbasin Plans]~~ to fish survival and/or productivity and for the maximum reach of river legally and physically possible. ~~[Location]~~
 - The riparian easement is wide enough to provide a buffer that will protect the ~~[most important part of the]~~ riparian area. ~~[The width required to provide this level of protection will be dependent on the stream type and riparian habitat condition and potential. A buffer width of 100 feet is often adequate to protect many riparian functions. However narrower riparian buffers will be considered if a site-specific case can be made that this narrower zone protects key ecological attributes of the system.] A minimum buffer width of 35 feet is sought, with a width of at least 100 feet preferred. This width preference will be dependent on the stream type and riparian habitat potential.~~
 - The riparian easement is ~~long enough~~ ~~[of sufficient duration]~~ to provide a buffer to protect the riparian area in the long-term ~~[and to ensure positive benefits to the associated stream habitat. Permanent easements are preferred, with a minimum duration of [50 years for temporary easements recommended. Temporary easements of less than 50 years will be considered if benefits to the associated stream habitat can be demonstrated; e.g., the riparian area is currently in very good condition.] 30 years recommended. [NOTE: This should be a requirement, and a minimum of 50 years should be recommended given the long-term nature of increasing salmon abundance with habitat protection and restoration efforts. Some flexibility, however, should be provided because a riparian area that currently is in very good condition can have immediate beneficial impacts.]~~
 - The activities on the land protected by the easement are sufficiently limited to ensure protection of the riparian area. ~~[NOTE: This should be a requirement.]~~
 - The quantity of land to be protected has been measured and will address a key limiting factor in the targeted reach. ~~[NOTE: This is similar to the first bulleted criterion under 3, so should directly precede or follow that criterion.]~~
4. ~~The proposal satisfies as many of the following biological components as possible:~~

- The riparian easement will provide benefits to ESA listed species ~~in jeopardized ESUs.~~ [NOTE: Is this criterion intended only for ESA listed anadromous salmonids? If so, it should read: "... to ESA listed anadromous salmonids."]
- The riparian easement will provide benefits to ~~ESA listed species or~~ other depressed native fish, ~~wild fish,~~ or wildlife populations.
- ~~The riparian easement will address key biological and habitat limiting factor(s) for the subbasin.~~ [Note: This is redundant with bullets 1 and 5 under section 3 above.]
- The riparian easement will help remove an imminent threat of degradation.
- The riparian easement will improve water quality in the identified reach.

5. [4] The proposal ~~strives to meet the innovative~~[satisfies the economic] criteria: [NOTE: These criteria are more economic or administrative than innovative, so call these "economic" criteria and drop the word "innovative." Again, the "strives to meet" isn't the same as "meeting." (see comment on #3 above). The proposal should be required to meet the criteria – they aren't particularly stringent.]

- The proposal explores methods to combine the riparian protection with other riparian enhancement activities.
- The proposal for securing the riparian easement demonstrates that it is cost-effective in terms of local and regional markets.
- The proposal is based upon or will develop standardized appraisal and valuation methods.
- The proposal documents cost-sharing or in-kind contributions from other parties totaling at least 10% of the overall value of the easement.

6. [5] The proposal satisfies monitoring criteria:¹

- [The proposal includes provisions for photographs at special interest points and systematic, uniformly spaced points in the reach (i.e., photopoints), a commitment to provide updated photos at intervals of two to five years, and digital archiving of the photos.
- The proposal shows a knowledge of and cooperation/coordination with regional State/Tribal or other monitoring efforts such as the Pacific Northwest Aquatic Monitoring Partnership. To ensure future coordination and cooperation with large-scale regional efforts, the proposal includes provisions for access to the property for sampling when and where necessary. The proposal describes that any data collection effort on the property will be done consistent with regionally agreed upon protocol. The proposal can demonstrate this by including written protocols or adequate

¹ The proposal should describe the monitoring protocols that will be employed to help determine if the proposed riparian easement will have the desired benefit.

references to public documents for monitoring metrics, sampling approach and timing, and data analysis even if the monitoring design, data collection, and evaluation are to be conducted by another agency, program, or individual.]

- ~~The proposal includes provisions for basic and effective long term monitoring of the riparian area protected, and for evaluating benefits to fish and wildlife and water quality.~~
- The proposal [assures electronic storage and retrieval of monitoring data and metadata (data collection methods) in one of the region’s public database systems with written protocols or adequate references to public documents.] ~~makes provisions for electronic storage and retrieval of monitoring data and metadata (data collection methods) in on of the region’s public database systems. Reports analyzing the monitoring data are to be issued annually or as conditions require. The proposal makes provisions for monitoring and experimental design metrics, sampling approach and timing, and data analysis even if the monitoring design, data collection, and evaluation are to be conducted by another agency, program, or individual.~~
- The proposal provides documentation and assurance of protecting the riparian area secured by the easement in the short term and the long term, such as information on the method and funding source for fencing ~~and [~~ continuous] livestock exclusion[, and to maintain fences.] ~~and removal.~~ [NOTE: As worded, this criterion doesn’t belong here. It could be combined with bullet 4 under #3 above.]

7. The proposal provides a watershed context:² [To reduce redundancy this section could be incorporated into the ecological/biological, administrative, and economic sections above. The text under footnote 2 could be incorporated in the lead-in statement to the ecological/biological criteria, as necessary and where not redundant with the actual criteria.]

- The proposal demonstrates collaborative efforts with other entities. [NOTE: Add to “administrative” criteria.]
- The proposal documents how opportunities for cost-sharing and collaboration with other entities were considered and developed. [NOTE: Add to “economic” criteria.]
- The proposal considers synergistic effects with other mitigation actions in the area such as efforts to increase tributary flows in the protected reach.

² The proposal should summarize the issues related to watershed health, streamflows, fish and wildlife status and factors presently limiting their abundance and productivity, and generally give background description and justification for the critical nature or importance of completing the proposed project. This context should explicitly include demonstration of consistency of the project with the Northwest Power and Conservation Council’s Fish and Wildlife Program and the appropriate subbasin plan, as applicable.

[NOTE: This is an example under “economic” criteria bullet 1, which alternatively could be listed under biological/ecological criteria; i.e., these criteria fit both criteria categories.]

- The proposal is based upon an existing watershed assessment or subbasin plan in a specific, targeted watershed or it describes how a strategic analysis of riparian habitat acquisition priorities will be developed for that watershed. [NOTE: This should be the first bullet under #3]
- A plan exists to have the riparian habitat secured by the easement protected from [invasion of exotic weed species,] harmful livestock grazing and other potentially damaging ~~agricultural~~ [human] uses. Irrigation is sufficiently limited or flow is sufficient in the stretch to be protected to provide adequate fish habitat and access. [NOTE: This should be combined with bullet 4 under #3, ecological criteria.]
- [The proposal explains how n]atural ecological processes are expected to be enhanced. [NOTE: This is an ecological/biological criterion.]

Riparian Easement Checklist for Specific Riparian Easement Transactions to Protect Tributary Habitat

Instructions: The local entity should complete the following checklist as completely as possible when proposing a specific riparian easement transaction to the Columbia Basin Water Transactions Program (Columbia Basin WTP). Upon transaction completion, the checklist should be updated to reflect any changes to the transaction and a final version should be submitted to the Columbia Basin WTP.

Name of Transaction:

Local Entity Proposing Transaction:

Entity Contact Person on Transaction:

Date Transaction Proposal Submitted to the Columbia Basin WTP:

Total Amount of Landowner Payment:

Amount of Landowner Payment Requested from the Columbia Basin WTP:

Principal Objective of the Transaction (e.g., "Securing permanent easement on 25 acres of land along Young's Creek to protect 2 miles of riparian area):

ACCOUNTABILITY CRITERIA

1. Have the following documents been submitted to the Columbia Basin WTP as part of the proposal? If not, when will the document(s) be submitted?

- a. Contract with landowner and easement holder detailing terms of the riparian easement transaction:

Yes No Date Submitted:

Comments:

- b. Preliminary valuation appraisal will be provided:

Yes No Date Submitted:

Comments:

- c. Hazardous materials assessment for the land will be provided:

Yes No Date Submitted:

Comments:

- d. Record of easement on property deed will be provided:

Yes No Date Submitted:

Comments:

- e. A copy of a completed and signed National Environmental Policy Act (NEPA) checklist submitted to Bonneville Power Administration:

Yes No Date Submitted:
Comments:

- f. Any other important documents to describe and record the transaction:

Yes No Date Submitted:
Comments:

2. What other information may assist the Columbia Basin WTP in evaluating this transaction or similar transactions in the future?

ADMINISTRATIVE CRITERIA

3. How did the landowner use the relevant property before the riparian easement transaction? Are there existing laws ~~and~~ regulations [, or conservation plans] that would limit the property use and provide the desired riparian protection without obtaining the riparian easement?
4. Is the landowner required to protect this riparian habitat under other laws or agreements? If so, explain.
5. When is the riparian easement expected to be recorded on the deed for the property?
6. Who will hold the easement property interest once the easement is secured for purposes of riparian protection?

ECOLOGICAL CRITERIA

7. What is the name of the stream(s) that will have increased protection as a result of the transaction? In what subbasin and watershed HUC is the stream(s) located? Please provide the NPCC Province and Subbasin name and Watershed 5th Field HUC (10 digit) number.
8. What is the reach(es) of river that will be protected? (Please provide the approximate river mile [and the longitude-latitude or UTM coordinates, using the Global Positioning System,] of the upper and lower ends of the instream reach(es) and the ~~Global Positioning System (GPS)~~ coordinates of the existing point(s) of diversion.)
9. For what term will the transaction secure riparian protection (e.g., ~~thirty~~ [fifty] years, in perpetuity)?
10. What is the maximum and minimum width of the riparian buffer? What is the average buffer width? Provide an explanation if the buffer must be less than 35 feet wide in any area.

11. ~~Has~~ [If both sides of the reach are not being protected by this easement, is] the opposite side of the stream ~~been~~ protected by a riparian buffer? If not, what is the potential to secure protection for the area on the opposite side of the stream?
12. How will the easement limit activities in the riparian area to protect the area from degradation?
13. What is the total acreage to be protected by the riparian easement (to [the nearest 0].1 acres)? How many miles of riparian area will be protected (to .01 miles)?
14. What ~~are the limiting factors~~ [aquatic and terrestrial habitat benefits are] expected to be addressed by securing the riparian easement?

BIOLOGICAL CRITERIA

15. What are the species name and ESA status (endangered, threatened) of the anadromous fish, specifically Evolutionary Significant Units (ESUs), expected to benefit by the riparian easement?
16. What other fish (~~i.e., Distinct Population Segment~~) and wildlife species[, including those listed under the ESA,] may be expected to benefit? How?
17. How is water quality expected to improve as a result of the transaction?
18. What is the current condition of the riparian zone and stream channel in the affected reach(es)? Are there other projects planned or in effect to address degraded riparian areas or stream habitat? Include photographs of systematically located sites in the reach(es), with a listing of the [longitude-latitude or UTM coordinates and] approximate river mile(s) of the site(s). In particular, include photographs of degraded riparian areas or stream habitat. Are there other projects planned or in effect to address degraded riparian areas or stream habitat?
19. Is there a plan to further enhance the stream reach through fencing or other means to create a riparian buffer to exclude livestock grazing? If so, what are the set-back distances from the stream? What are the provisions to maintain the fences and for what period of time?

~~INNOVATION~~ ECONOMIC CRITERIA

20. Name what tool(s) and/or strategies were used in developing this transaction to protect riparian area? [NOTE: What is this asking for? This needs more specific language and/or examples.]
21. What cost-share opportunities have been leveraged in protecting the riparian area?
22. What is the:
 - a. total cost of the riparian easement to be acquired;

- b. total amount paid to the landowner from all funding sources [(e.g., cost-share funds)];
- c. amount of landowner payment requested through the Columbia Basin WTP;
- d. requested transaction costs related to this transaction and the portion (in \$) of these costs requested through the Columbia Basin WTP; and
- e. total cost of the transaction (easement cost and transaction costs).

If the easement is donated (partially or totally) and/or the water right holder payment is from more than one source, please approximate the value donated and/or the source and itemize the amount of cost-share funds.

23. What method was used for determining the value of the easement?

24. What incentive(s) motivated the landowner to enter into the transaction?

MONITORING CRITERIA

25. How will the riparian easement be documented, monitored and enforced?

26. How will benefits to fish and/or wildlife be documented and monitored?

27. How will improvements in water quality be documented and monitored?

Describe where the monitoring data and metadata (descriptive information about the origin, context, quality and condition, method used to collect, or characteristics of the data) will be stored, electronically if possible, and decision makers and the public can access the data. How often will reports be issued giving an analysis of the data? Who is responsible for analyzing the data and issuing reports? Please provide key contact information if another agency, program, or individual will be collecting, storing, and evaluating the flow, biological and water quality data for the reach protected)

WATERSHED CONTEXT *(To be provided by a QLE once annually for each subbasin in which they are completing transactions.)*

28. What does the Northwest Power and Conservation Council's relevant Subbasin Plan state regarding riparian protection and enhancement in the watershed?

29. Are there other existing watershed assessments or comprehensive planning efforts under which your riparian protection efforts are being implemented? If so, please describe the assessment(s) and/or effort(s).

~~30. What kind of riparian planning efforts are ongoing in the basin, if any? What is the status of those efforts? Are those efforts attempting to address riparian protection and enhancement?~~

30. [How does this easement compare to other riparian protection projects ongoing or planned for the tributary? [F1]

Describe where this easement is located relative to other reaches with riparian protection projects. Will the easement help fill a gap between stream segments with healthy riparian zones? Will it ultimately provide the same, more, or less protection than other reaches are receiving?]

31. Are the benefits anticipated from the riparian protection ~~part of or tied to~~ [dependent on] other habitat improvement projects in the watershed? If so, please describe the relationship and briefly describe the other projects necessary to achieve the habitat goals [for this easement].

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[F1]I thought the original wording for question 30 was a bit too broad. Many agency specialists wouldn't have been able to answer it satisfactorily at the subbasin level.