Integrated Strategy for Implementing Water-Right Reservations

Grays-Elochoman and Cowlitz River Basins (WRIAs 25-26)
Salmon-Washougal and Lewis River Basins (WRIAs 27-28)

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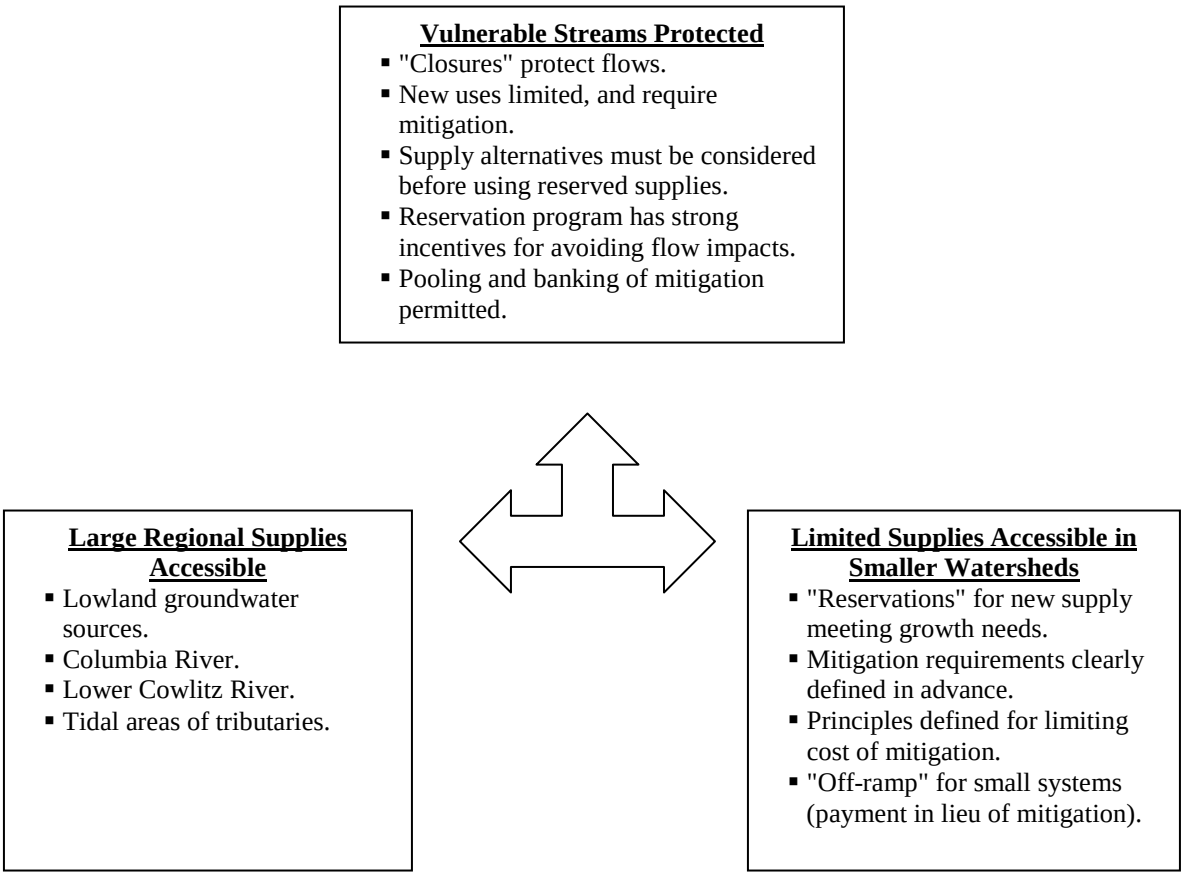
Executive Summary

Watershed Management Plans adopted in 2006 for WRIAs 25/26 and 27/28 defined policies to balance stream flow and habitat protection objectives with the need for additional water supplies. The plans identify large water resources that can support regional water supply development without harming fish habitat. The plans also recognize that smaller streams need protection, and establish strict limits on new supply development for these streams. Where available stream flows can support small depletions for supply development, water supply "reservations" are defined. Applicants for these reserved waters will need to mitigate effects on stream flow in order to use these supplies.

Figure ES-1 summarizes key elements of the closure and reservations program adopted by the two Planning Units. The Washington State Department of Ecology is currently in the process of adopting the stream closures and reservations into State law.

Figure ES-1. Reservation Program Elements



In order to effectively implement the closure and reservation program, the Planning Units determined specific procedures should be developed for water rights applicants and the state agencies that review requests for new water supply. A Mitigation Subcommittee with members from both Planning Units was formed in 2007 to develop these procedures. This report documents the Subcommittee's recommendations for consideration by the two Planning Units. The Department of Ecology and Department of Fish and Wildlife (DFW) have been involved

throughout development of these procedures. Upon adoption by the Planning Units, the agencies will use these procedures in processing water rights within WRIAs 25-28.

What is a Water Reservation?

A water reservation is a specific quantity of stream flow within a "closed" stream that remains available for potential use in the future. The Department of Ecology is authorized to issue new water rights, up to the limit of the reservation. Reservation quantities were determined during the watershed planning process based on existing stream flow conditions, habitat needs, forecasts of water supply needs, and related factors. Reservations are specifically associated with specific water users (typically cities or towns) or categories of users (such as private industry, agriculture or small water systems).

Procedure for Accessing Reserved Supplies:

The Planning Units intend that stream flow, even under water reservations, should be protected from unnecessary depletion. A stringent set of conditions were established to carry this out. At the same time, the Planning Units intend that reserved water be available to serve demonstrable needs of growing communities and economic development in WRIAs 25 – 28. To accomplish these dual goals, the following procedures have been defined:

- An applicant for reserved water must show it is eligible for the reserved supply; define the proposed water supply project; and assess its impact on stream flow in any closed streams.
- Applicants must demonstrate that alternatives have been reviewed to determine whether other water sources could meet same need with less impact to streams.
- Where stream flow in closed waters will be reduced by the supply project, the applicant must propose flow-related mitigation actions. These actions must offset at least 50% of the depletion amount through flow restoration at an upstream location, if feasible and economical. The Subcommittee developed a scoring procedure Ecology can use to evaluate "credit" for flow-related mitigation actions.
- Remaining flow depletion must be offset, if feasible and economical, through habitat/watershed mitigation actions. A separate scoring procedure was developed to evaluate credit for these actions. The scoring procedure is based on comparison of habitat effects between the flow depletion and the mitigation actions.
- In order to protect water rights applicants from excessive costs, principles are defined for including cost as a consideration in determining the mitigation requirements. These principles will be applied to applications on a case-by-case basis.
- If these requirements are met, Ecology will issue a water right authorizing the applicant to develop its supply project. The reservation will be drawn down, based on the net quantity of stream flow depletion. If water remains in the reservation, the applicant can return later with additional applications.
- The applicant must carry out the approved mitigation actions and provide documentation to the State that the actions were consistent with the approved

proposal. Monitoring & maintenance will be required for actions that require time to fully develop. In addition, financial guarantees of the mitigation actions will be required as a condition for approval of water rights.

These procedures are summarized in Figure ES-2.

Off-Ramp for Small Flow Depletion

The Planning Units recognizes that the review and analysis required by this procedure may be expensive to carry out and may require specialized expertise. In the case of small water supply projects, this can be an unreasonable burden, especially for smaller communities in the watersheds. Therefore, an exemption was created allowing some small supply projects to bypass the mitigation procedure. This exemption can be exercised at the choice of the applicant, but only for water rights that would deplete stream flows by a quantity of 0.2 cubic feet per second (cfs) or less (after accounting for actions that directly offset flow depletion). If the applicant chooses to use this exemption, they can pay into a mitigation fund instead of proposing mitigation actions. This in-lieu fee is set at $62,000 for every one-tenth cfs, per mile of stream affected. This fee was established based on the average cost of fish habitat mitigation actions in western Washington. Funds will be pooled and used to carry out mitigation projects within five years. The Subcommittee has recommended that LCFRB be identified as the administrator of the pooled funds, and that it report to Ecology on use of the pooled funds every two years. The in-lieu fee can be adjusted from time to time, so that it provides adequate funds for equivalent mitigation actions.

Opportunity for Banking Mitigation Credits

The Planning Units recognize that some organizations may find suitable mitigation opportunities long before they need to tap their reserved water supplies. In other cases, a third party may be able to carry out mitigation and make mitigation credits available to water users. The procedures provide for both of these situations by allowing mitigation credits to be banked and/or transferred.

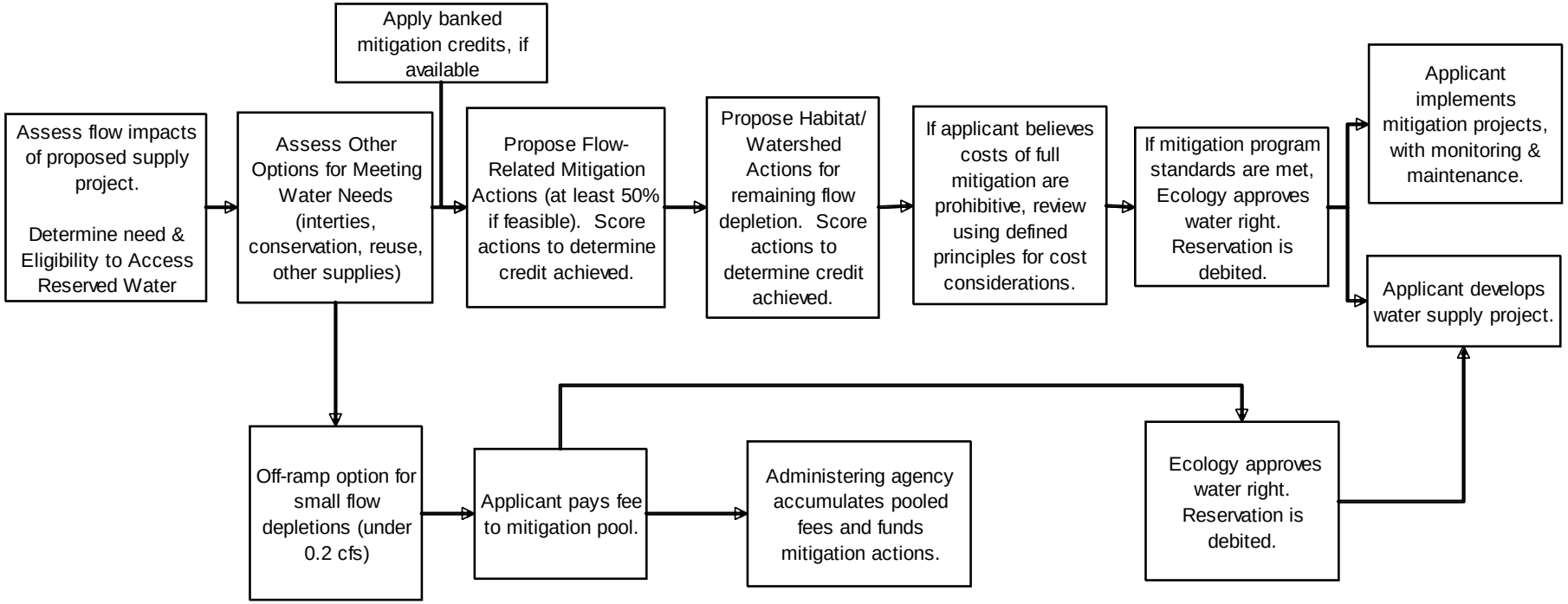
Agency Procedures

This report spells out the recommended procedures in some detail. Even so, it is anticipated that Ecology will need to prepare some additional materials in the form of fact sheets for applicants and standard forms for applicants and agency staff. Some training of Ecology and DFW staff will also likely be needed to support consistent administration of these procedures. In addition, Ecology will need to track use of the water reservations over time so they are not over-allocated.

Advisory Committee

This report recommends that an Advisory Committee be formed to guide implementation of these procedures, and to assist with dispute resolution where applicable. The Advisory Committee should be representative of the WRIA 25-28 Planning Units.

Figure ES.2. Overview of Process to Access and Mitigate Water Reservations



1.0 Background and Purpose

This Report summarizes work completed by the Water Rights Mitigation Subcommittee representing two Watershed Planning Units in southwestern Washington State: the Watershed Planning Unit for the Grays Elochoman and Cowlitz River Basins (WRIAs 25-26); and the Watershed Planning Unit for the Salmon-Washougal and Lewis River Basins (WRIAs 27-28)[1]. The Subcommittee was formed to develop procedures for implementing policies on accessing water rights reservations within these four WRIAs, including an approach to proposed mitigation actions by water rights applicants. This activity is one element of implementation of the two Watershed Management Plans developed for these WRIAs.

This work has been performed under the provisions of Chapter 90.82 RCW; and was funded through grants from the Washington State Department of Ecology. Management of the grant funds and oversight of the project consultant has been performed by the Lower Columbia Fish Recovery Board (LCFRB). Initial work was completed in 2007 and a report was issued and approved by the two Planning Units in February 2008. Follow-up work was then done in 2008 to further develop specific aspects of the strategy for implementation. A set of five briefing papers was prepared as noted in the References Section. This report updates the prior report and presents the full mitigation strategy with results from the additional work. Additional details on selected topics can be found in the briefing papers.

The watershed plans for the two planning areas were prepared by the two planning units and adopted in 2006. Both plans include policies intended to balance the needs of water for growth and development with those of instream flow supporting aquatic life and multiple beneficial uses. The plans recommend that the Washington State Department of Ecology "close" many of the surface waters in these WRIAs to further appropriations. This means that new water rights would not be issued. However, the plans also recommend that the State Rule enacting these closures include "reservations" of water for certain uses. The reservations were carefully defined to minimize further impacts on stream flow from new water uses. Generally the reservations represent flow volumes of approximately one to two percent of existing flows in specific streams during the low-flow season. The intent of the combined closures and reservations was to protect instream flows while providing limited access to new water supplies.

The reservations represent flow volumes of approximately one to two percent of flow in specific streams during the low-flow season.

Attachments A and B to this Report provide policy statements from both Watershed Management Plans regarding water reservations, as well as tables listing the specific quantities reserved, by stream and by user.

The Watershed Planning Units anticipate that most new applications for water rights under the reservations will be for ground water rather than surface water. The reservations are identified in terms of stream flow depletion, rather than the quantity of water used. A larger quantity may be pumped, as long as the stream flow depletion is not exceeded. The Mitigation Subcommittee did not examine methods for quantifying effects of pumping on stream flow. This is because the

[1] WRIA stands for Water Resource Inventory Area

Department of Ecology already has considerable experience in this regard, and the Subcommittee preferred to focus its work on the new procedures required to implement the Watershed Plans.

The reservations are set aside for municipal water systems, domestic wells and certain other types of users. Table 1 summarizes categories of users with access to the reserved waters. For full information, including specific reservations by stream, see Attachments A and B.

Table 1 Categories of Water Users with Access to Reserved Waters[1] (WRIAs 25/26 and 27/28)
Cities and Towns (identified individually)
Public Utility Districts (identified individually)
Small Community Water Systems
Domestic Wells
Commercial Uses
Other Beneficial Uses

[1] Not all user groups have access in all areas. For specific reservations assigned to each group, see Attachments A and B.

The policies in the Watershed Management Plans place stringent conditions on accessing the reserved waters. These include:

- A water right applicant must first review alternative sources of supply that would not deplete stream flow in a closed reach (or would reduce depletions compared with the proposed source of supply);
- The applicant's proposal to withdraw water must include off-setting and mitigating actions;
- Flow depletion must be mitigated to the maximum extent practicable using flow-related actions. No less than half of the stream flow depletion must be offset through flow-related mitigation (with some exceptions); and
- Other mitigating actions, such as habitat improvements, must be carried out to mitigate for flows not offset through flow-related actions.

At the same time, the Watershed Management Plans recognize that imposition of overly restrictive requirements could undermine the plans' policies on provision of new water supply. Therefore the plans recognize that both cost and logistical barriers are valid considerations in evaluating the adequacy of mitigation actions.

Following adoption of the Watershed Plans in 2006 the Planning Units entered Phase 4 of the watershed planning process. Phase 4 addresses implementation of the Watershed Management Plans. As one step in developing a detailed implementation plan, the two planning units formed a joint subcommittee to develop more detailed procedures for implementing the reservations and determining how mitigation proposals should be evaluated. The intent has been to provide specific guidance to the Department of Ecology for processing water rights applications for reserved waters and that the mitigation procedures will be practical, predictable, and transparent for water rights applicants.

Mitigation procedures should be practical, predictable and transparent.

This Report presents the findings and recommendations of the Water Rights Mitigation Subcommittee. The report is organized as follows:

1.0 Background and Purpose
2.0 Reservation Accounting
3.0 Preliminary Steps for Water Right Applications
4.0 Mitigation Actions
5.0 Proposed Documentation of Mitigation Actions
6.0 Monitoring and Maintenance of Mitigation Actions
7.0 Cost Considerations
8.0 Alternate Procedure for Small Flow Depletions
9.0 Mitigation Banking
10.0 Application and Evaluation Procedures

Additional details are contained in the attachments to this Report.

The Detailed Implementation Plans (DIP) for WRIAs 25/26 and 27/28 contain provisions for a biennial review of progress and results during implementation of the Watershed Management Plans (see Section 11 of the WRIA 25/26 DIP and Section 12 of the WRIA 27/28 DIP). The procedures described in this report should be included in the biennial review.

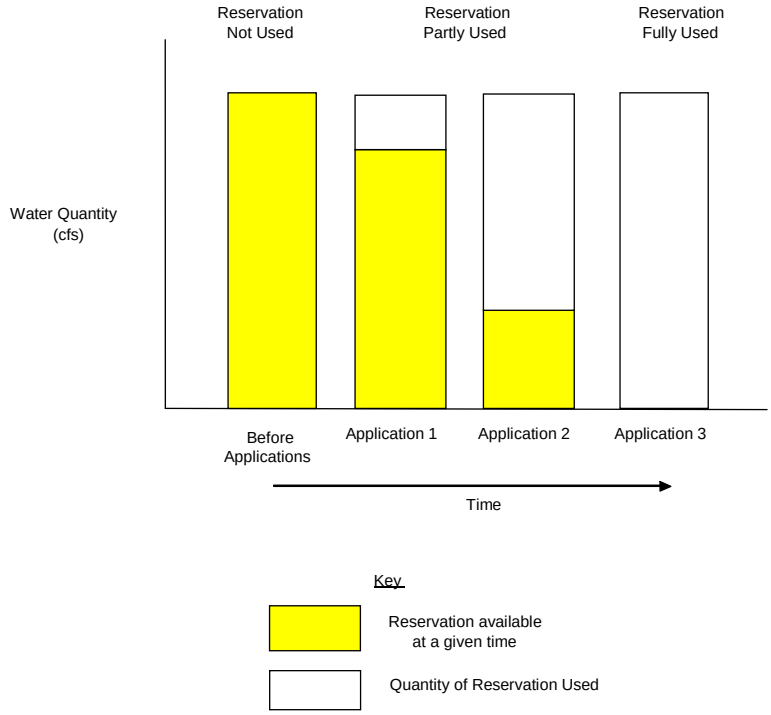
2.0 Reservation Accounting

The Watershed Management Plans established the reservation amounts by stream and by eligible applicants, but did not provide a detailed discussion of how the reservations would be tracked and managed over time as new water rights are issued to specific users. The Subcommittee has developed more detailed guidance on this topic.

Water reservation accounting principles are based on the guidance outlined in Section 3.3.1 and Appendices I (WRIA 25/26) and H (WRIA 27/28) of the two Watershed Management Plans. The specific procedures used for determining mitigation "credits" and "debits" are described in Section 4 of this report.

A given reservation may be used up all in a single water-right application; or may be gradually "drawn down" over time. Figure 1 depicts a reservation that is gradually drawn down, by three water right applications over a period of several years.

Figure 1. Use of Reservation Over Time



Successful implementation of the reserved water strategy will require that the Department of Ecology, as the primary regulatory entity, develop a management and accounting system to track the status of water reservations and related data. It is suggested that this system be made accessible over the Internet. The Planning Units recommend that the following general elements be included in this system:

- Reservation amount (original and current, by user or group)
- Complete history of reservation debits and credits by stream
- Complete history of reservation debits and credits by entity
- Project application information:
  - Entity
  - Type (flow, habitat)
  - Status (approved, denied, pending)
  - Description, goals and objectives
  - Location(s) (legal description, subbasin, reach, etc)
  - Project metrics
  - Plans and specifications
  - Debit and credit calculations
  - Permit conditions, restrictions
  - Monitoring
  - Operation and maintenance requirements
  - Relationship to other projects
  - Agreements

- Related flow monitoring data and information, if required
- Number of domestic wells, installed under the reservation policy, compared with number planned at time the reservation was established.[2] .
- Banking metrics
- Web-linkages to related plans, guidance documents, and other information sources

The Planning Units recommend that the details of a water reservation management and accounting system be determined further as part of continued activity during the Phase 4 Implementation period. The Department of Ecology should coordinate closely with the Planning Units, water systems, resource agencies, LCFRB, and other implementation partners during development of this system.

3.0 Preliminary Steps for Water Right Applications

Figure 2 shows preliminary steps to determine whether a water rights applicant can apply for reserved waters, and whether a mitigation proposal is required.

Flow depletion estimates on a stream (Box 2) will be quantified based on standard methods currently accepted by Ecology. Where depletion of closed waters is less than 0.2 cfs, the Mitigation Strategy allows an applicant to use a simplified procedure that requires less information and analysis (see Section 8).

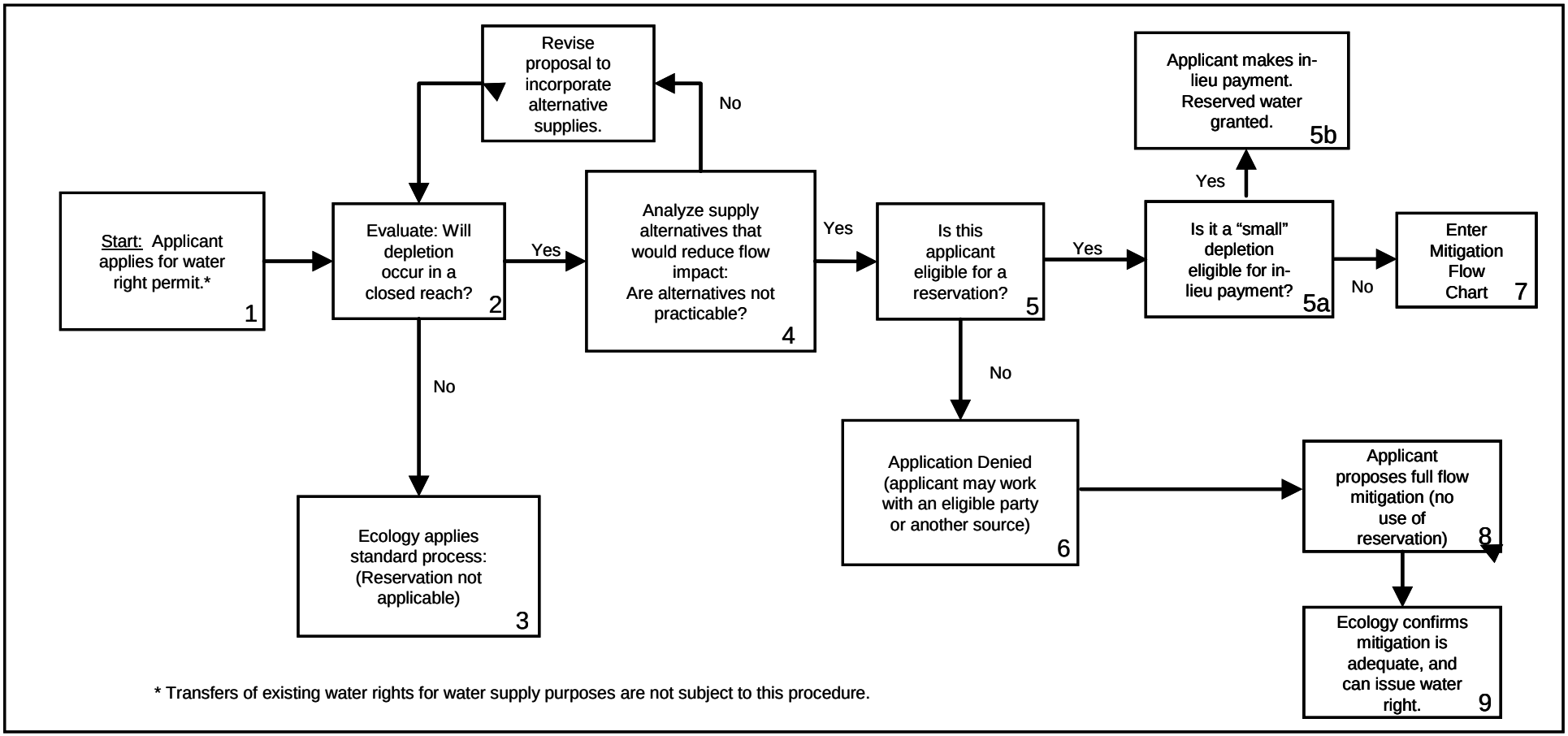
For surface water applications, there will be a well-defined point of diversion on a surface water body. For ground water applications, a discrete "point of impact" on an affected water body will need to be defined, or impacts will need to be defined for different reaches, to enable the steps discussed below.

Box 4 of the pre-screening procedure calls for review of water supply alternatives for the applicant that could reduce or eliminate flow impacts on the affected surface waters. This is a key element of the strategy for implementing water right reservations in WRIAs 25-28. Additional details on this step are included in Attachment C.

Box 5 of the pre-screening procedure requires Ecology to determine whether the applicant is eligible for reserved waters. Eligibility can be readily determined from the two Watershed Management Plans, based on the information reproduced in Attachments A and B of this report.

[2] The quantity of water reserved for domestic wells was generally selected based on "predicted land use over a 20-year time horizon" (see Appendix I of WRIA 25/26 Plan and Appendix H of WRIA 27/28 Plan).

Figure 2. Pre-Screening Procedure for Reserved Water



4.0 Mitigation Actions

Under the policies presented in the Watershed Management Plans, applications for reserved waters must be accompanied by offsetting and mitigating actions. The Subcommittee understands that these actions will normally be expressed as conditions associated with a water right issued by the Department of Ecology. The Subcommittee understands that "offsetting" actions are essentially flow-related mitigation actions that replace water in the stream. Other mitigating actions may include a wide variety of actions that either help moderate streamflow impacts or provide other benefits to aquatic resources and aquatic habitat. Collectively, all of these offsetting and mitigating actions are referred to as "mitigation" in this report and attachments.

The procedures recommended by the Subcommittee break mitigation down into two main categories:

- Flow-related mitigation; and
- Habitat/watershed mitigation.

These two categories are handled somewhat differently because the plan emphasizes flow-related mitigation actions over other actions. Figure 3 displays the process for an applicant's mitigation proposal to be evaluated.

Mitigation ordinarily must occur within the same LCFRB-defined subbasin (or for the larger river systems, a subbasin that is hydrologically part of the same larger basin). Limited exceptions may be permissible, where greater benefits can be demonstrated through mitigation in another subbasin.

Key steps in the process occur in Box 10 (Evaluate Flow-Related Mitigation) and Box 14 (Ledger System for Habitat/Watershed Mitigation). The evaluation process that occurs within these two boxes is elaborated further in Attachments D and E.

In brief, these two evaluations are conducted as follows:

4.1 Box 10: Evaluation of Flow-Related Mitigation

Flow-related mitigation actions may include a range of actions that directly replace flow depleted by a new water withdrawal or diversion. Actions that may be proposed in this category could include:

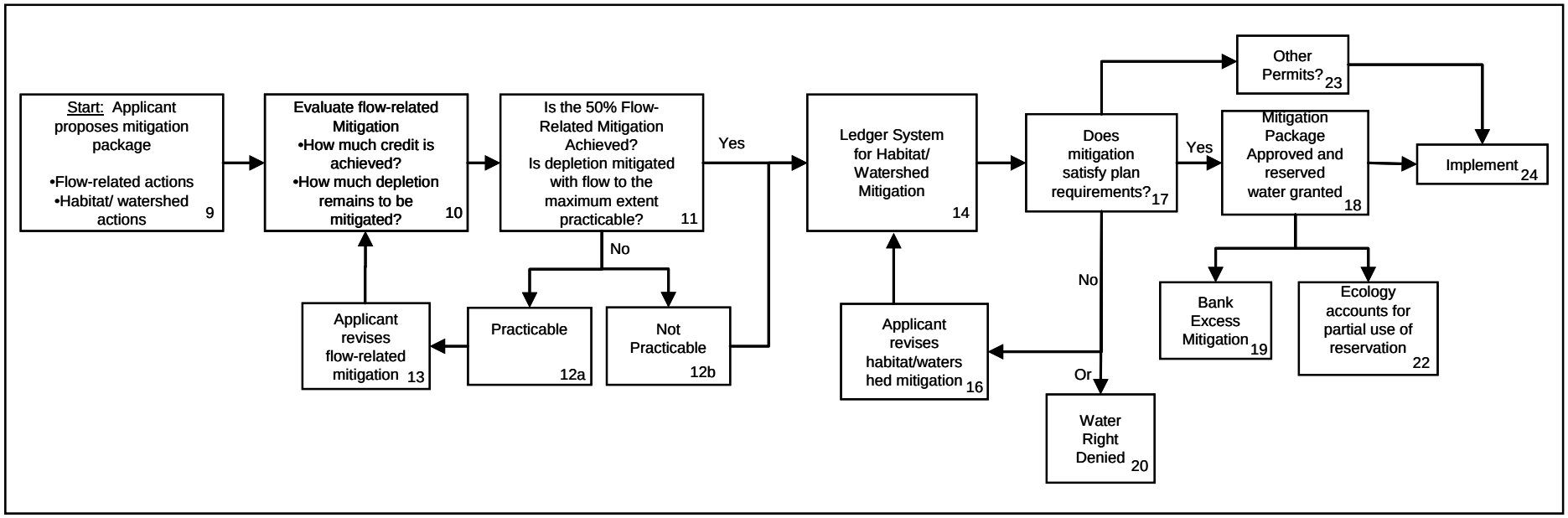
- Acquisition of out-of-stream water rights to be dedicated for instream flows. (Applicants should be advised that credit for water rights acquired is subject to a determination of extent and validity by Ecology and may be less than the nominal quantity shown in water rights documents.);
- Salvaged water obtained through conservation actions not mandated by law, that result in increased stream flows (e.g. conservation on irrigated farmland);

- Pumping of ground water with direct or indirect discharge to a stream at a time and manner to provide net increase in flow;
- Modification of wastewater systems to permit increased discharge of treated effluent to a stream, meeting suitable water quality requirements; and
- Retirement of "exempt" wells, as when public water supply is provided to an area formerly served by wells. However, credit awarded must relate to actual usage of water (not the maximum legal limit), must account for recharge via septic systems, if applicable, and must be consistent with water quantities per well or per capita associated with exempt well demand forecasts and reservations in the Watershed Management Plans. Furthermore this action must include provisions to permanently decommission the wells and prevent new exempt wells from being installed to serve the same properties in the future.
- Other projects that directly enhance stream flow.

The following basic assumptions apply to flow-related mitigation:

- Flow depletion estimates on a stream will be quantified based on standard methods currently accepted by Ecology;
- For surface water applications, there will be a well-defined "point of diversion" on a surface water body. For ground water applications, a discrete "point of impact" on an affected water body will need to be defined, to enable the steps discussed below. In cases involving more than one pumping or withdrawal location, or variable stream flow capture along a gradient, multiple points of diversion or impact will be established;
- The 50% requirement for flow-related mitigation must be accomplished at the defined point(s) of impact or diversion. For this test, the quantity of flow will be the only metric. However, seasonality will be considered; and
- The required 50% flow-related mitigation may be provided in a location other than at the defined point(s) of diversion or impact provided the applicant demonstrates that overall greater resource benefits would result. In these limited exceptions, a quantitative analysis similar to that described in Attachment F must demonstrate overall greater resource benefits as measured by distance (in river miles) of watercourse affected, quantity of flow benefit and impact (in cfs) relative to baseline habitat conditions, water quality and salmon recovery reach tiering, in both the impacted and benefiting reaches.

Figure 3. Mitigation Evaluation for Reserved Water



Note: box numbers not sequential; some numbers missing intentionally to maintain consistency with other documents.

A determination will be made as to whether the flow-related mitigation proposed has similar attributes to the water depleted, or significant differences. This step will compare the depleted water body and the water body identified for mitigation, using attributes such as length of stream affected; physical relationship (mainstem/tributary); seasonality of effects; water quality; and importance to listed species.

If there are significant differences between the depletion effect and the mitigation action, then a "weighting" process will be performed on the mitigation action. The weighting process determines how much "credit" will be awarded for the flow-related mitigation action, in comparison with the flow depletion (see Attachments D and F).

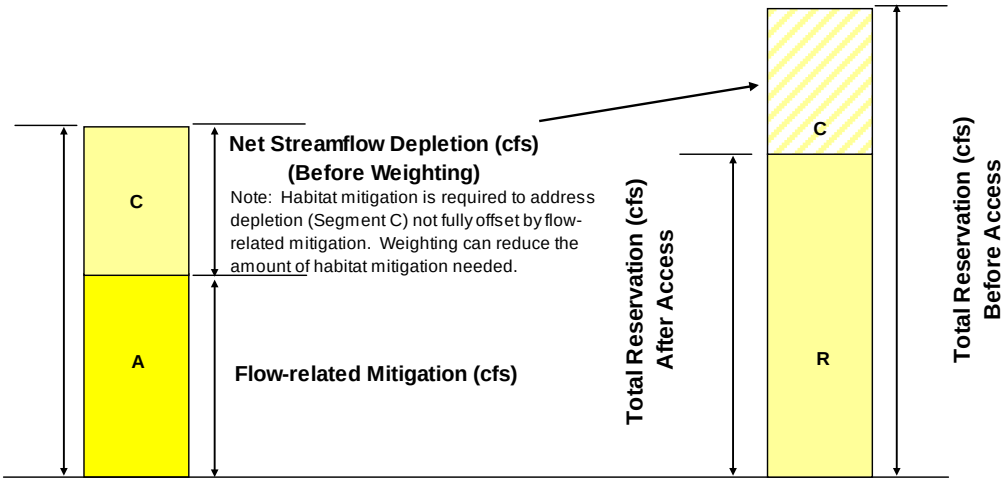
Based on the results of this weighting process, a determination will be made as to whether the flow depletion is fully offset; partially offset; or more than offset. The results will be used to determine:

- Whether further mitigation is required using habitat/watershed mitigation actions; and
- Whether excess mitigation credit is awarded that can be banked for the future (see Section 9).

Further details on evaluation of flow-related mitigation actions are presented in Attachment D. Attachment F contains an example of the evaluation of flow-related mitigation, including a spreadsheet tool to assist with the weighting and scoring procedure. Attachment I contains information on Ecology's evaluation of water rights proposed for use in mitigation actions.

The quantity of flow-related mitigation achieved affects how a water user's reservation will be "debited." The quantity of flow restored through flow-related mitigation actions does not count as use of the reservation (for this calculation, the absolute quantity of flow, prior to any weighting, will be used). Therefore, the more flow-related mitigation a user can include in its mitigation plan, the more reserved water will remain available for additional uses in the future. This is depicted in Figure 4.

Figure 4: Relationship of Flow -Related Mitigation to Reservation Accounting



If streamflow depletion is fully mitigated through flow-related actions, the reservation would not be debited and would remain fully available for future access. However, if impacts are only partially offset through flow-related actions (Figure 4, Segment A), the remaining streamflow depletion (Figure 4, Segment C) is "debited" from the reserve.

Habitat/watershed mitigation actions will also be required to offset net streamflow depletion impacts, but will not be used to reduce the amount of "debit" from the reservation. Additional instream flow benefits that result in "up-weighting" of the flow-related mitigation credits under the procedures outlined in Section 4 can be used to reduce the amount of habitat mitigation required to address net stream flow depletion as represented by Segment C. The type, scope and scale of habitat mitigation will be determined using the guidance outlined in Section 4.2 of this document. Attachment F contains a spreadsheet tool that helps to illustrate how weighting of flow-related mitigation actions may reduce the amount of habitat mitigation required.

4.2 Box 14: Evaluation of Habitat/Watershed Mitigation

After the applicant's flow-related mitigation actions have been evaluated, further actions may still be needed to mitigate the remaining flow depletion. Evaluation of habitat/watershed mitigation actions is more challenging, because these actions do not directly offset stream flow and results are much harder to quantify. Furthermore, it is expected that habitat/watershed mitigation actions will be highly diverse from one application to another.

The Subcommittee devoted considerable attention to developing a scoring system that could accommodate a wide array of habitat/watershed mitigation actions. The initial basis for a scoring system of this nature was review of similar procedures developed by other agencies. For example consulting staff reviewed and summarized the Regional General Permit impact and mitigation point system used by the U.S. Army Corps of Engineers for dredge and fill projects under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Consulting staff also reviewed the Ohio Environmental Protection Agency guidance for Section 401 certification; and the procedures used by the Deschutes River (Oregon) Groundwater Mitigation Bank. Features that seemed most applicable to the mitigation program for WRIAs 25/26 and 27/28 were based primarily on the Corps of Engineers example.

The Subcommittee recommends use of a "ledger system" for scoring proposed mitigation actions. On the "debit" side of the ledger is the remaining stream flow depletion that was not mitigated through flow-related. The debit is scored based on four factors:

- Quantity of remaining flow depletion measured in cubic feet per second (cfs);
- Length of stream affected by the flow depletion, measured in tenths of a mile (0.1 mi.);
- Whether instream flow is considered limiting to fish production at the reach-scale relative to other habitat factors; and
- Importance of the affected stream reaches as fish habitat (based on reach tiers from the LCFRB Habitat Work Schedule).

A matrix was developed to enable any stream depletion to be "scored" using these four factors. This debit score then becomes the basis for comparison of habitat/watershed mitigation actions for a given water right application.

On the "credit" side of the ledger, the applicant's habitat/watershed mitigation actions are also scored. The Subcommittee identified five standard categories of habitat/watershed mitigation that are expected to be encountered most frequently. For each of these five categories, a simple scoring system was developed. The value of mitigation within each category is generally defined by a) the importance of the mitigation reach to fish recovery, and b) the specific kind of mitigation action proposed. The value of mitigation between each category and flow depletion was determined using different rationale and methods.

Table 2 lists the five standard categories of habitat/watershed mitigation. Further details are provided in Attachment E.

In the ledger system process, the points on the "credit" side are compared with points on the "debit" side to determine how fully the applicant's proposal mitigates for the remaining stream depletion.

As indicated in Section 2 (Reservation Accounting), scoring of habitat/watershed mitigation does not affect the quantity of water deducted from the applicant's reservation. Instead, it is used to determine whether the applicant has fully met the mitigation requirements of the Watershed Management Plans.

It should also be noted that fully mitigating the remaining flow depletion (after accounting for flow-related mitigation) may not be required in all cases. For further information, see Section 7 (Cost Considerations).

Some additional elements of the mitigation procedure are listed below. For further requirements, see Attachment E.

- The mitigation actions must be for actions that are not already mandated to occur (e.g. culverts, critical areas protection, etc.);
- Mitigation should occur in the same sub-basin as the flow depletion. Mitigation may be completed in another sub-basin if the applicant can demonstrate a greater resource benefit;
- Mitigation projects and actions should be developed and implemented using best available science and have a high long-term likelihood of success. Specific performance goals and measures (e.g. success rates, temporal, desired future conditions, etc.) will be associated with each mitigation action and mutually agreed upon by the applicant and Ecology; and
- In cases where multiple parties contribute to a project, the water right applicant only receives credit proportional to their contribution.

Table 2 Rationale for Scoring Different Types of Habitat/Watershed Mitigation Actions						
	Mitigation Actions	**Rationale**	**Processes and Functions Associated with Mitigation Actions**	**Mitigates Reduction in Aquatic Habitat**	**Mitigates Hydrologic Impacts**	**Method for Determining Value Relative to Flow Reduction**
1	Side Channel/ Off-Channel Habitat Restoration (per acre)	Increase the quantity of aquatic habitat	Refugia; spawning habitat; invertebrate production; over-wintering habitat	X		IFIM modeled relationship between streamflow and WUA
2	In-Channel Improvements (per 100 sq. ft)	Increase utilization of "downstream" aquatic habitat by increasing habitat quality	Refugia; wood and gravel recruitment; sediment sorting; bedform diversity; bed material retention	X		IFIM modeled relationship between streamflow and WUA
3	Wetland Restoration (per acre)	Some wetlands can attenuate transport of upslope stormwater to streams; store water from high-flow events; and / or contribute to baseflows	Maintenance of stream low-flow ; Attenuation of stormwater impacts; wetland water quality function; wetland habitat function		X	Best Professional Judgment
4	Floodplain Reconnection (per acre)	Levee removal or setback allows for increased utilization of floodplain and increased water storage for low flow maintenance	Channel stability; sediment sorting; floodplain connectivity /storage; bedform diversity; hydraulic diversity; nutrient input; refugia		X	Best Professional Judgment
5	Riparian Preservation and Restoration (per acre)	Riparian vegetation attenuates transport of water from watershed to channel and improves habitat conditions in WUA	Shading; Bank stability; width/ depth; pollutant filtering; flow retention; erosion control; LWD input; refugia; channel roughness; allochthonous material input; floodplain roughness		X	Best Professional Judgment
6	Other Mitigation Actions	Applicants may propose other types of habitat / watershed mitigation. Those proposals will be evaluated on a case-by-case basis	Variable	Variable	Variable	Best Professional Judgment

5.0 Proposed Documentation of Mitigation Actions

In order to ensure that the habitat mitigation is successful, and therefore meets the obligation required to access reserved water, a mitigation plan must be developed to fully document the mitigation action approved through the scoring procedure. If applicable, the mitigation plan elements in Table 3 will be required. Justification must be provided for omitting any of these elements from a mitigation plan.

Table 3
Documentation Required for Approved Mitigation Actions

Required Elements
Estimate of impacts and mitigation requirements[1]
Description of mitigation actions[1]
Goals and objectives of actions
Detailed implementation plan
Performance standards
Maps and drawings of mitigation proposal
Additional Elements (if applicable)
As-built drawings
Protecting the site (e.g. conservation covenant, deed restriction, etc.)
Operation and maintenance plan
Monitoring and evaluation plan
Adaptive management and contingency plan
Agreements or performance bonds or other guarantees that applicant will fulfill mitigation

[1] Applicants will prepare these two items as part of the routine evaluation of mitigation proposals submitted to Ecology. See Attachment E.

General requirements for mitigation plans should be consistent with commonly used mitigation and restoration guidance. The following table relates the "standard" water rights mitigation actions identified in Attachment E to available guidance from other sources.

Table 4
Mitigation Actions and Existing Guidance on Mitigation/Restoration Plan Elements

	Mitigation Action	Army Corps Ecology Wetland Mitigation Guidance	WDFW Hydraulic Project Approval Mitigation Guidance	Stream Habitat Restoration Guidelines Guidance
1	Side Channel/ Off-Channel Habitat Restoration		x	x
2	In-channel Improvements		x	x
3	Wetland Restoration	x		
4	Floodplain Reconnection	x	x	x
5	Riparian Preservation and Restoration		x	x
6	Other	TBD	TBD	TBD

It is expected that, during pre-application discussions with Ecology and WDFW, a conceptual plan will be discussed and agreements will be made on the feasibility of the mitigation project,

the value of the mitigation actions, and fulfillment of the mitigation requirements. At the time the water rights application is to be processed, the technical aspects of the mitigation actions must be developed to the 30% level. During formal application review, the prior agreements will be vetted and finalized. The new water right permit will be the contract that directs the mitigation plan to go forth as proposed or with conditions. A time requirement for completion of mitigation will be part of the permit. A final 100% design must be drafted and submitted prior to the mitigation project being performed.

6.0 Monitoring and Maintenance of Mitigation Actions

Where mitigation actions depart from simply acquiring offsetting water rights, they may need to involve monitoring and/or maintenance components. This is important because some mitigation actions may not perform as planned; may deteriorate over time; or may be affected by floods or other changes in watershed conditions. It would be desirable for flow-related mitigation accompanying the issuance of reserved waters to be effective throughout the "lifetime" of the authorized water use. However, this must be balanced against the intent that mitigation actions should be feasible and economical for water users accessing their reserved supplies.

The Mitigation Subcommittee discussed different concepts for how long-term monitoring and maintenance needs of habitat mitigation actions could be addressed. The Subcommittee recommends that the applicant be responsible for monitoring and maintenance for only a fixed period of time. The intent is to ensure that the mitigation action is successful as initially conceived, but not to require an open-ended obligation to maintain it permanently. Performance standards should be developed for different types of mitigation actions, similar to those used in comparable local, state and federal programs. Where an action has uncertain effects over the long-term, this should be reflected in the mitigation scoring procedure.

The Mitigation Subcommittee discussed mitigation monitoring and maintenance requirements associated with several different types of environmental permits at the local, state and federal levels (details are documented in the briefing paper prepared on this topic – see References). These included U.S. Army Corps of Engineers Dredge and Fill Permits and Water Quality Certifications; Washington State Department of Fish and Wildlife Hydraulic Project Approvals; and local critical areas permits in southwest Washington, with a focus on Clark County's required procedures. The protocol described here was based on these examples, adapted for purposes of the water reservations policy.

6.1 Monitoring and Maintenance Guidelines for New Water Right Permits

Some of the proposed mitigation plan elements are related to monitoring and maintenance. These elements are discussed in this section. The goals and objectives, performance standards, and monitoring guidelines should be developed in table format and related to the six mitigation actions that are specified in the current water right guidance document and Table 4. Attachment G provides examples of what these tables could look like. Attachment G also provides an example of the specificity at which the performance standards could be written.

Goals and Objectives

The mitigation goals and objectives will be defined in project-specific terms and with measurable performance standards. The goals and objectives will depend on the specific kind of project that is proposed. However, for any given project, the relevant objectives and performance standards can be selected from a list and applied in a mitigation plan.

Performance Standards

Performance standards describe measurable attributes that can be used to evaluate success in meeting the goals and objectives of a compensatory mitigation project. A direct connection must be evident between these performance standards and the goals and objectives of the mitigation project. Furthermore, the performance standards define when the attributes must be measured to evaluate project success.

The mitigation sub-committee recommends "up-front" performance standards for high-certainty projects. "Up-front" performance standards would minimize the amount of case-by-case technical review required by Ecology and WDFW. Attachment G contains performance standard guidance for water right applicants. The applicant may propose changes to these performance standards. The wetland standards are adapted from WSDOT guidance (2008). The wetland performance standards allow for case-specific customization because of the variable nature of site limitations. The standards for all other mitigation actions have been adapted from the Washington Salmon Recovery Funding Board action effectiveness monitoring protocols (2008).

Monitoring and Evaluation Plan

Monitoring requirements are directly related to one or more performance standards. The monitoring frequency, the parameters monitored, and success criteria are all interrelated and should be constructed together in a performance standard table (Performance Standard Guidance, Attachment G). The Monitoring duration is the total number of years that encompass the monitoring period. After the final year of monitoring, a determination can be made on the success of the project. The monitoring duration will not exceed ten years.

Submitting "As-Built" Reports

As-Built reports will be required to verify compliance with the agreed-upon mitigation actions and specifications. For some mitigation actions, such as "In-Channel Improvement" projects, review and acceptance of the as-built report may be the only environmental performance standard and would be sufficient to confirm mitigation success and close out a mitigation agreement.

Maintenance, Contingency, and Adaptive Management

Maintenance, contingency, and adaptive management plans will be defined by applicant but must meet intermediate and final performance standards and would be subject to

conditions during permit review. Contingency and adaptive management plans would come into play if performance standards were not met.

Completion of Compensatory Mitigation Requirements (on-site inspection confirming mitigation success and written confirmation closing out mitigation agreement)

Mitigation success will be verified with monitoring reports submitted by the applicant and/or on-site inspections by Ecology and/ or WDFW staff. The content of the monitoring reports are based on the performance standards.

6.2 Compliance and Financial Assurances

Financial assurances in the form of a bond or other security acceptable may be required by the administering agency, in an amount sufficient to re-establish the mitigation in the event of failure or subsequent disturbance. The financial assurances shall remain in place for the length of time specified for monitoring and will be released after a request by the applicant and a final review and/or on-site inspections by the administering agency. In the event of failure of the mitigation, the financial assurances will be used to re-establish the mitigation. The quantity of the financial assurance is proposed by the applicant and is based on the costs anticipated for mitigation construction, monitoring, and maintenance. Staff from the administering agency will review and approve the assurance. Forms will support these legal agreements. The following types of financial assurances may be used:

- Bonds: A bond can be established between the water right applicant and a bonding institution. The applicant will pay a fee for the bond. If the applicant does not successfully complete their mitigation project, the bonding institution pays the bond amount to the agency administering the mitigation agreement.
- Deposit Account Agreements: The applicant puts their own money into a bank account. The agency administering the mitigation agreement will have access to the account in the event that the mitigation is not successful.
- Escrow Agreements: The applicant puts their own money into an escrow account. The agency administering the mitigation agreement will have access to the account in the event that the mitigation is not successful.
- Letters of Credit: A line of credit is established by the applicant at a bank. The applicant allows the administering agency has access to this line of credit if the mitigation project is not successfully completed.
- Letters of Commitment: A legal agreement from an applicant that is a public agency to the agency administering the mitigation agreement. The commitment is to pay the administering agency the agreed upon amount of money in the event that the mitigation is not successful.

7.0 Cost Considerations

The policy on water right reservations in the Watershed Management Plans for WRIAs 25/26 and 27/28 indicates that cost should be a valid consideration in evaluating the adequacy of mitigation proposals (Attachments A and B). There are several steps where cost considerations may apply:

- In determining whether water supply alternatives are available that would avoid depletion of a closed stream;
- In determining whether an applicant can mitigate more than 50% of stream flow depletion using actions that are not flow-related;
- In determining whether flow-related actions will be used "to the maximum extent practicable;" and
- Where habitat/watershed mitigation is proposed to supplement the required flow-related mitigation, determining whether the habitat/watershed mitigation actions meet the mitigation program requirements.

The intent of using cost as a consideration is to prevent situations where water users having a designated reservation cannot reasonably access the reservation because mitigation requirements are too burdensome. The reservations were set aside with the understanding that water users may need to deplete stream flow, within limits, as new supplies are needed. The barriers to accessing this supply should not be so high that it makes the reservations unavailable in practical terms.

However, the reservation was not intended as a "free pass" either. Where costs of full mitigation are considered prohibitively expensive this does not mean that mitigation will not be done. Instead, it should drive the applicant to consider other mitigation alternatives. Even if no suitable alternatives can be found, the applicant would need to mitigate a portion of the impacts to the maximum extent practicable. Practicable is meant to include consideration of economic and logistical factors (which would include the availability of both flow-related and habitat-related mitigation opportunities).

To make this policy operational, the Mitigation Subcommittee reviewed a number of alternative approaches (these are documented in meeting minutes and related briefing papers on file at LCFRB). The Subcommittee concluded that cost considerations should be applied on a case-by-case basis, when an applicant for reserved supplies believes the cost of mitigation to be prohibitive. In these cases, Ecology should apply the following principles:

- Cost considerations should support mitigation objectives of the plan; yet should not prevent access to reservations by designated users;
- Costs paid by applicants to acquire water rights to offset flow impacts should be comparable to market value for water rights in the affected WRIA.
- Costs of other mitigation actions should be comparable to typical costs for similar mitigation actions in the affected WRIA.

- Costs of the total mitigation requirement should be reasonable in the context of the total cost of the water supply being developed. This should include short-term and long-term costs of supply.
- Consideration of cost factors should be applied consistently from project to project and among different applicants across WRIAs 25-28. Information from other water rights granted under the water reservation policy in WRIAs 25-28 may be considered in evaluating whether costs are reasonable.

Section 10 of this report describes application and evaluation procedures, including use of an Advisory Committee with representatives from the two Planning Units. If requested by an applicant, cost considerations will be included in the scope of Advisory Committee review.

8.0 Alternate Procedure for Small Flow Depletions

The Watershed Planning Units in both WRIAs 25/26 and 27/28 recognize that the mitigation procedures outlined in this report may be overly burdensome for water systems whose supply projects create relatively small flow depletions. The Planning Units intend that an "off-ramp" be provided in these cases, with an alternate means of satisfying the overall goals of the Watershed Management Plans. The Mitigation Subcommittee recommends a process for small flow depletions in which a payment can be made to a mitigation fund for the WRIA, rather than preparing a specific mitigation plan. This would enable funds from a number of small water supply projects to be "pooled." In addition to making the procedure more simple for these cases, this offers the potential advantage of enabling larger and more valuable mitigation projects to be performed, instead of many small projects scattered throughout the watersheds.

The Subcommittee recommends that any proposed water rights that impact flows by 0.2 cfs or less in the water bodies having identified reservations, be considered a "small" withdrawal eligible for a payment into the mitigation pool.

For uses of a water reservation that would have small impacts, this section further develops the concept of a payment into a fund for targeted mitigation, in lieu of having the water right applicant developing and implementing an individual mitigation proposal. Selection of this option in lieu of carrying out mitigation directly would be at the discretion of the applicant.

(Note: The magnitude of stream flow impacts does not affect the requirement for an alternatives analysis prior to issuance of a water right for reserved supply. Applicants must document the alternatives analysis for any water right application that would deplete flow in a closed water body, even if the depletion is 0.2 cfs or less.)

In-Lieu Payment Amount

The subcommittee recommends that a value of $62,000 per 0.1 cfs be paid by the applicant for each river mile affected by the flow depletion. The depletion should be measured based on the greatest expected seven-day depletion during the lowest flow month of the year for the affected water body (e.g. August or September). The basis for this value is given in Attachment H. This amount can be pro-rated in increments of 0.01 cfs-mile (e.g. the in-lieu payment for an impact of 0.05 cfs-mile would be $31,000). The payment is capped by the cost ceiling discussed above.

(Note: a "cfs-mile" is a measure of flow and distance along the river channel. It is calculated by multiplying flow [measured in cfs], by distance [measured in miles]. It is anticipated that fractional values will be used, such as hundredths of a cfs, and tenths of a mile.)

Adjusting the In-Lieu Payment Over Time

Mitigation costs will change over time in response to the cost of materials, land acquisition, and other factors. Therefore, the dollar value established as a in-lieu fee payment amount should also change. The Mitigation Subcommittee recommends this be accomplished as follows:

- The in-lieu fee payment amount should be adjusted through a review of restoration/ mitigation cost data at least once every five years.
- In the intervening years the cost should be adjusted for inflation annually, using the construction cost index (CCI) issued by the construction industry publication *ENR*.

Administration of Pooled Funds

The Mitigation Subcommittee considered several options for the organization that should receive and use in-lieu payments for mitigation. Options included:

1. One of the State natural resource agencies with jurisdiction over water resources or habitat restoration such as the Washington State Department of Ecology, Department of Fish and Wildlife or Salmon Recovery Funding Office;
2. The various County governments with lands in WRIAs 25-28 (or a single county designated by other counties to carry this out); or
3. The Lower Columbia Fish Recovery Board (LCFRB).

The Subcommittee recommends that LCFRB be given this responsibility. This is due to its focus on the same geographic area as the two watershed plans; its cross-jurisdictional capabilities aligned with watersheds; the close match of the habitat mitigation activity with LCFRB's overall mission; and the organization's demonstrated ability to manage funding for natural resource management purposes. However, in the event LCFRB's charter under State law terminates and the organization is decommissioned, then the Subcommittee recommends this function be transferred to one of the State natural resource agencies listed above.

The Subcommittee recommends that funds collected from applicants in lieu of mitigation projects be held within a designated account, shown as a line item in LCFRB's annual budget. Expenditures from this fund should be allocated by individual WRIA (dollars collected from a WRIA should be spent in the same WRIA, with a strong preference towards projects in the same subbasin as the depletion caused by the water right involved). Accounting procedures should support reporting by WRIA. Money deposited should be used for actual mitigation within five years of deposit.

At least 85% of these funds should be used directly for mitigation purposes (the Subcommittee recommends no more than 15 percent maximum be available for program administration). The funds should be used to restore habitat or watershed resources that have been impacted by

reduced flows. In keeping with the Planning Units' overall policy on mitigation for use of reserved waters, funding may be used for flow enhancement (preferred if available) or non-flow, habitat/watershed restoration actions. It is acceptable that funds may be used in combination with funds obtained from other sources, to leverage the value of the projects funded.

Finally, the Subcommittee recommends that LCFRB staff prepare an annual biennial report to the LCFRB Board detailing funds received and funds expended, by WRIA and subbasin. The report should be sent to each affected County and the Department of Ecology and should be made available to the public on LCFRB's web site. Past annual reports should be retained in LCFRB files and should be made available to the counties, Ecology and the public upon request.

9.0 Mitigation Banking

The Mitigation Subcommittee discussed possible banking of mitigation credits in the context of accessing reserved water supplies. Banking of mitigation credits is the means by which a party can accumulate and hold credit for habitat restoration work done so that it may be applied to a water right application in the future. This may be identified as advanced mitigation for a known water supply project; or may be held as credit for any suitable project in the future. In addition, the person or organization carrying out mitigation actions could sell or otherwise transfer their credits to another party in support of that party's water right application.

The ability to bank habitat restoration credits offers the following possible advantages:

- Parties may undertake habitat restoration actions to meet current and/or anticipated mitigation needs in a manner, time, scope, nature, and cost that are most advantageous to them;
- Parties with limited or no habitat restoration expertise and experience may be able to acquire needed mitigation credits without having to directly identify, design, and undertake restoration work;
- Provides an incentive to undertake earlier, larger, and more effective restoration efforts; and
- Provides the potential to help leverage non-mitigation habitat restoration efforts addressing high priority needs.
- Mitigation actions carried out in advance of a water supply project provide environmental benefits for a period of time before project impacts occur (temporal benefit).

Banking does not mean that applicants can identify any habitat projects done in the past and get credit for them. Generally, the applicant must obtain approval <u>in advance</u> of carrying out the mitigation action (however see exceptions below). Other limitations are described below. Other provisions of the "standard" mitigation procedure for reserved water also apply.

9.1 Procedures for Accumulating Credits for Future Use

Eligible Projects

In order for a water rights applicant to "bank" credit under the mitigation system, the following requirements must be met:

- The mitigation action is eligible for credit only if it was carried out on or after July 1, 2006.
- The mitigation action(s) must meet any other requirements for mitigation credit established in the Integrated Strategy for Implementing Water Right Reservations.
- The applicant must document the source(s) of funding used for the project, and certify that the project was not funded through habitat restoration or habitat enhancement programs administered by the State of Washington or federal agencies. (However if the project also included funding sources besides those listed here, a portion of the project may qualify for credit).
- The applicant must certify that the project has not, and will not be used to meet the requirements of any other permits (or show that the action goes above and beyond other permit requirements, in which case only the extra work will be credited);

Mitigation credits accumulated through other environmental mitigation programs active in WRIAs 25-28 may be used to access water reservations under this program, as long as the conditions listed above are met. For example this could include separate wetland mitigation banking programs; or Clark County's proposed "Mitigation Marketplace" program.

Administering Agency

The Mitigation Subcommittee recommends that the Department of Ecology administer the system for banking mitigation credits. However, Ecology may designate another state or local agency to assist in this activity. In either case, Ecology should retain responsibility for proper functioning of the mitigation banking system. This is appropriate because Ecology has the responsibility and authority to issue water rights, including water rights where applicants perform mitigation actions as a condition of the right. Therefore Ecology ultimately has the responsibility to evaluate such actions.

The Subcommittee anticipates that administration of this program will primarily consist of record-keeping. Credits accumulated need to be recorded, and the owner of those credits needs to be identified. Credits also need to be associated with particular subbasins or WRIAs. When new water rights are awarded, applicable mitigation credits need to be deducted from the applicable party's "account."

The administering agency should issue periodic "statements" to parties holding mitigation credits. It is suggested these statements be issued annually and document the name and address of the party, the project that was used to generate credits, the purpose of mitigation credits with respect to reserved water supplies; the amount of credit, and the

subbasins or WRIAs where credits can be applied. The statement should also inform parties holding credits that they have 90 days to inform the administering agency if they believe the information in the statement is incorrect.

(Note: The Subcommittee has discussed the possibility that LCFRB could be designated by Ecology to assist with administration).

Use of Mitigation Credits

Mitigation credits are intended solely for use in accessing water supplies reserved in specific subbasins under the State Rules adopted pursuant to the Watershed Management Plans. The procedures outlined in the Integrated Strategy for Implementing Water Right Reservations apply to banked mitigation credits.

In the event that mitigation credits are accumulated but the applicable reservation is used up before the credits are put to use, there is no guarantee the party that accumulated credits will be able to put them to use. However, in this event the administering agency may consider transferring the mitigation credits, in whole or in part, to another subbasin for use in accessing another water reservation in the same WRIA. In this case the degree of credit transferred should be determined by the administering agency by evaluating the relative value of the mitigation that was accomplished and the expected stream flow impacts from accessing the reservation.

Scoring Procedure

The scoring procedure presented in Attachments D and E of the Integrated Strategy document will be used to determine the amount of credit received for mitigation actions.

This scoring procedure presents a fundamental challenge to banking of mitigation credits. For "flow-related" mitigation actions (water for water), the scoring procedure requires that both the mitigation proposal and the proposed water source development project be well defined. Points are awarded on a relative basis, by comparing the characteristics of flow depletion (location, timing, water quality, etc.) against the characteristics of the mitigation action. However for banking purposes the future source project may not be defined at all. Hence, for flow-related mitigation actions the points (credits) cannot be calculated initially. (Note: This problem does not apply to habitat/watershed actions. In those cases, the mitigation credits are calculated independently of the source development project).

In order to resolve this challenge, the administering agency will need to retain documentation on the scoring system in place at the time the mitigation credits are banked. The characteristics of the mitigation action will need to be fully documented, to permit subsequent scoring at such time as an application is made for a water right to support a specific water source development project.

Dispute Resolution

An administrative dispute resolution procedure needs to be defined, with Ecology's involvement. This may involve use of a local "Advisory Committee" that has been suggested to represent the Watershed Planning Units (the exact makeup, roles and responsibilities of the Advisory Committee have not yet been defined). The Subcommittee suggests the following steps be taken to resolve disputes mitigation credits administered under this program.

1. The water right applicant or party holding credits should prepare a written statement of their position and submit it to Ecology. Ecology's Water Resources Program staff should then prepare a written response. The Water Resources Program Manager (Section Manager) for Ecology's Southwest Region office should review both of these documents and determine how the dispute should be resolved.
2. If this determination is not acceptable to the applicant or party holding credit, then the Advisory Committee should be requested to review the facts of the situation and the documentation described above. The Advisory Committee should make a recommendation to the Section Manager. The Section Manager should then issue a new determination in writing, either upholding the initial determination or modifying it.
3. If this second determination is not acceptable to the applicant or party holding credit, then the Director of the Department of Ecology, or his/her designee, should make a final determination. (As with any other agency action, this administrative determination can be challenged through legal action in the appropriate venue.)

(Note: Time limits should be put on each of these steps, following discussion with Ecology.)

9.2 Procedures for Transferring Banked Credits

Providing avenues for parties who carry out mitigation actions to transfer credits to others offers additional advantages to the system outlined above. Advantages include:

- Opportunities to acquire credits from others can provide additional flexibility for water rights applicants seeking to comply with the mitigation requirements associated with their reserved water supplies.
- The ability to transfer credits can create a market for mitigation actions, giving rise to economic incentives for habitat restoration activity. This also expands the field of funding opportunities for habitat restoration projects.
- One party may have access to funds at the right time to move on a habitat restoration activity that another party may be able to reimburse at a later date. For example, swaps of this nature increasingly occur in the conservation field between non-profit organizations and government agencies.

In principle there is nothing terribly complex about expanding the banking concept to allow for transfer of mitigation credits. Parties seeking to either acquire or provide

credits can negotiate terms for these transactions between themselves. At this time the Subcommittee does not envision a need for a "banker" to hold credits.

However it will be important that Ecology have procedures in place to document transfers of credits from the original party to the party acquiring them. Therefore, the following procedures are suggested:

Under Ecology's mitigation credit accounting system, discussed above the "owner" of mitigation credits would be identified. If the owner wishes to transfer credits to another party, Ecology will need a procedure to authorize this transfer. The procedure needs to be set up in a fashion that prevents fraud and insulates Ecology from liability in the event of disputes.

Upon receiving suitable authorization, the accounting system discussed above should document the transfer of mitigation credits to the new owner. From that point forward, the system can operate just as though the new owner had always held the mitigation credits. That owner could put them to use as part of an application for reserved water, or could again transfer the credits to another party.

10.0 Application and Evaluation Procedures

The evaluation procedure for proposed mitigation actions will require considerable effort on the part of both the applicant and the State agencies with responsibility for reviewing water rights and habitat mitigation actions. The Subcommittee envisions that the procedure for preparing and reviewing the necessary information could be performed as follows:

- An applicant for a new water right should have an opportunity to meet with Ecology and DFW prior to submitting an application, to discuss the proposed water use, mitigation scoring, and mitigation alternatives;
- A questionnaire should be developed to accompany the water right application. The questionnaire should be designed to assemble the information that will be needed in the evaluation procedure. Guidance materials should be developed for applicants to support the process. An applicant will then be required to submit the application form/questionnaire in order to trigger the scoring procedure;
- Ecology and DFW will share responsibility for initial scoring of the application, using a standard scoring sheet (most of the scoring items will be specifically assigned either to Ecology or to DFW; some items may truly be done jointly). In doing so, they may request additional information from the applicant;
- Results will be provided back to the applicant; and the applicant should have an opportunity to discuss the results with agency reviewers. At this point, an applicant should have an opportunity to submit further information if needed. If this yields new information, the application may be re-evaluated;
- Final results will then be provided to the applicant. The applicant may choose to move forward; withdraw; or submit to Advisory Committee review;

- A standing Advisory Committee (AC) should be convened representing the planning units (however the AC will not include Ecology or DFW. For any particular application, the AC also will not include the applicant). The role will be to review disputed applications through some kind of structured process that includes hearing from both Ecology and the applicant;
- After reviewing an application submitted for review, the AC will provide written recommendations and findings to Ecology and the applicant regarding the proposal's consistency with the purpose, intent and requirements of the Watershed Plan and adopted guidelines;
- Upon receipt of review comments from the AC, Ecology will have the final word on how to proceed. Ecology may choose to re-score the application; or leave the scoring intact. Ecology is not required to follow the AC recommendation. At that point, Ecology will issue the decision on:
  - whether to approve or deny the application, including the mitigation program. This should be accompanied by documentation of the rationale for the decision, with reference to the scoring system;
  - if approved, Ecology's Report of Examination will detail the conditions to be associated with the water right, including mitigation requirements; and
  - how much the reservation will be debited.
- As with any other water right decision, the decision is appealable through the Pollution Control Hearings Board.

The steps above will require materials to be developed that would be used in the application process. These include: a) an application form/questionnaire designed to obtain the information needed for evaluation and scoring; b) a fact sheet or guidance document explaining in summary form how the scoring process works and what kind of mitigation features will earn higher credit; and c) a scoring sheet that allows staff to score applications efficiently and consistently (the scoring sheet will presumably be electronic, so it performs the scoring automatically as staff input information).

In addition, the Subcommittee believes Ecology and DFW, in coordination with LCFRB, should develop a simple training program for staff charged with reviewing applications from WRIAs 25-28.

References

The Mitigation Subcommittee and LCFRB were assisted by HDR Engineering, Inc. in developing the Mitigation Strategy. After the initial Mitigation Strategy (February 2008) had been prepared, the Committee had HDR prepare briefing papers on selected topics for further discussion. These papers are on file at LCFRB and provide additional details on selected topics. They are listed as follows:

- Alternatives Analysis for New Water Supply, August 11, 2008.
- Cost Considerations for Mitigation Actions, December 9, 2008 (Draft).
- Downscaling for Small Streams, August 15, 2008.
- Monitoring and Maintenance of Habitat Mitigation Actions, September 15, 2008.
- Pooling and Banking of Mitigation Credits, February 27, 2009.
- Minutes of Mitigation Subcommittee meetings, April 2008 – March 2009.