

**Independent
Multidisciplinary
Science Team
(IMST)**



State of Oregon

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December 14, 2006

The Honorable Ted Kulongoski
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The Honorable Peter Courtney
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The Honorable Jeff Merkley
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Enclosed is the January 1, 2005–June 30, 2006 Accomplishment Summary of the Independent Multidisciplinary Science Team (IMST) for the Oregon Plan for Salmon and Watersheds (Oregon Plan) brochure, and Administrative Report 2006-1 titled *Evaluation of Responses to IMST Recommendations*. The brochure summarizes the accomplishments of the IMST. The full report, including independent reports, letter reports to state agencies, briefings, and presentations, is available on the IMST's web site at http://www.fsl.orst.edu/imst/reports/Jan2005_June2006AR.htm. We hope this new online format for detailed reporting of our accomplishments will allow us to communicate with a much broader spectrum of interested parties than the traditional hard copy report, and at the same time save Oregon taxpayers considerable printing and mailing costs.

The Administrative Report documents recent recommendations issued by the IMST, formal agency or state entity (e.g. Oregon Plan Core Team) responses to the recommendations, and the IMST's evaluation of the Responses.

During the reporting period, the IMST completed three major technical reviews:

- Oregon Department Fish and Wildlife's draft *Native Fish Status Report*,
- Oregon Department of Environmental Quality's draft *Technical Basis for Revising Turbidity Criteria*, and
- Oregon Department of Agriculture's draft *Agricultural Water Quality Program Monitoring Guidebook*.

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The IMST also conducted a joint workshop with the Oregon Watershed Enhancement Board on restoration effectiveness monitoring and prepared a synthesis of the workshop. In addition the Team began one additional technical review that was completed in November 2006. This was a review of a federal agency guidance document for managing the removal of sediments from Oregon streams. The IMST has continued to work on independent projects evaluating how urban and rural residential land uses and management of eastern Oregon resources may affect salmonid recovery and watershed functions.

In addition, the IMST has continued to provide an independent, unbiased review of science issues related to the Oregon Plan to state agencies and the people of Oregon. The IMST also undertook the development of a list of the critical science information still needed by the Oregon Plan and will continue to refine it during 2007.

Feel free to contact us if you wish to further discuss these reports and/or any related issues with you (Nancy Molina at 503-661-6042 or nmolina@comcast.com; Carl Schreck at 541-737-1961 or carl.schreck@oregonstate.edu).

Sincerely,

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IMST

Evaluation of Responses to IMST Recommendations

IMST Administrative Report 2006-1

Released December 14, 2006



Independent Multidisciplinary Science Team

Oregon Plan for Salmon and Watersheds

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Introduction

Oregon Revised Statute (ORS) 541.409, which created the Independent Multidisciplinary Science Team (IMST), specifies that agencies are to respond to the recommendations of the IMST, stating “(3) If the Independent Multidisciplinary Science Team submits suggestions to an agency responsible for implementing a portion of the Oregon Plan [for Salmon and Watersheds], the agency shall respond in writing to the team explaining how the agency intends to implement the suggestion or why the agency does not implement the suggestion. The Team shall include any agency responses in its report to the Joint Legislative Committee on Salmon and Stream Enhancement”.

For this reason, the IMST has explicitly identified its suggestions as recommendations and has directed them to specific agencies. The recommendations of the Team are included in Technical Reports, Letter Reports and letters. They deal with technical and scientific matters that the Team feels are important for the Oregon Plan. In this report we are including responses to letter reports and technical reports produced in 2002 and 2004 but not included in the 2005 Administrative Report. One recommendation was issued in 2006 and is included in this report. As with the previous Administrative Reports, we briefly evaluate each response and indicate if scientific and technical perspectives strongly suggest additional consideration of the recommendation. We understand that there may be matters of policy or other issues that make it impossible or undesirable to implement a specific recommendation of the Team. Our purpose in suggesting reconsideration of some recommendations is not to argue against specific policy or management decisions, but to ensure that the technical and scientifically based consequences of the decisions are clearly understood.

IMST believes that the key characteristics of a good response are:

- It includes a short, clear statement that the agency (or entity) (a) accepts or agrees with the recommendation or (b) that it rejects or disagrees with it. In some cases, an agency (or entity) may be reluctant to agree or accept a recommendation because it sees significant difficulties in implementing it. However IMST believes if the recommendation is sound, then the agency (or entity) should work towards eliminating the impediments to implementation that it sees.
- It provides short, clear descriptions of what the agency (or entity) intends to do to implement recommendations it accepts (including how it might remove impediments) or, as required by ORS 541.409, that it provides specific reasons why it rejects the recommendations. Discussion between agency or legislative staff and Team members at IMST meetings should also help clarify agency (or entity) and IMST perspectives, and most importantly, advance the mission and goals of the Oregon Plan.

Once formal responses are received, the IMST reviews the scientific adequacy of each response and determines if further action or consideration by the agency (or entity) is warranted. In the material that follows we (a) state the recommendation of the IMST, (b) summarize the agency response to it, and (c) give our evaluation of the response. We conclude by indicating whether or not additional consideration of the recommendation is warranted. Each response was assigned to one of four general categories: adequate, intermediate, inadequate or indeterminate.

- **Adequate** means that the IMST supports the decision of the agency
- **Intermediate** means that the IMST does not fully support the agency decision because the decision will decrease the likelihood of accomplishing the goals of the Oregon Plan in a timely manner, but not doom it to failure. IMST notes its concerns but stops short of suggesting that the recommendation be reconsidered.
- **Inadequate** means that the IMST feels the decision by the agency will seriously detract from achieving the goals of the Oregon Plan, and the IMST strongly suggests that the decision be reconsidered.
- **Indeterminate** means that IMST cannot tell what the agency decided to do with the recommendation, or lacks sufficient information to fully evaluate the response.

The material is organized by the report or letter from which the recommendation came. The responses to recommendations were reviewed and evaluated over an 18-month period and involved different IMST members as some appointments have ended and new ones have begun. The IMST has worked to maintain consistency in the evaluations.

Earlier Administrative Reports on responses to recommendations can be accessed at www.fsl.orst.edu/imst/reports/evaluation.html.

**IMST Evaluation of responses to recommendations made in the
7/31/02 Letter to Governor John Kitzhaber, Senate President Gene Derfler, and House
Speaker Mark Simmons, regarding the scientific review of OWRRI's 1995 report entitled
"Gravel Disturbance Impacts on Salmon Habitat and Stream Health"**

Recommendation 1, directed to the Oregon Plan Core Team was included in IMST's Administrative Report 2005-1 and is not repeated here at the time the 2005-1 report was issued; responses had been received from the Division of State Lands (DSL) but had not yet been fully evaluated by the Team. Below are the responses provided by DSL and IMST's evaluations.

Recommendation 2. DSL should develop and integrate a basin level approach into its management policies.

DSL Response: DSL indicated that under the Oregon Plan model, the state natural resource agencies are cooperatively collecting and analyzing data on a watershed scale basis. Basin level planning is a team exercise and requires more than one agency. The agency believes that the State's recent effort to assess the Oregon Coast Coho ESU, following NOAA Fisheries' Policy to *Evaluate Conservation Efforts (PECE) Analysis* is a good example. This cooperative study model is a good but implementing this IMST recommendation would require expanding DSL's jurisdiction legislatively. Such an initiative would require additional staff and unidentified funding.

IMST Conclusion: *Inadequate*. In the IMST's letter report the Team indicated that DSL needs to move away from managing removal-fill permits on a purely site-specific basis and at the same time consider what other removal-fill operations may be occurring within the basin. Individual operations may not have significant impacts on the stream reach but, collectively, multiple operations may have significant impacts on the stream ecosystem. This approach can incorporate input from other agencies, but DSL needs to develop their own basin level framework. Does DSL agree with this recommendation conceptually? IMST would welcome the opportunity to interact with DSL if it would be useful to the agency regarding this recommendation.

Recommendation 3. DSL should determine sediment budgets and bedload transport rates on stream reaches with permitted aggregate mining operations.

DSL Response: DSL indicated that instream mining practices are difficult to evaluate because most stream systems, particularly in their lower reaches, have experienced cumulative, anthropogenic impact that affect natural stream function. The agency also lacks the financial resources to conduct such studies. Studying these relationships is probably only effectively accomplished on a case-by-case basis, at least in the short-term. For this reason, DSL believes that their permit program is and will continue to conserve waters of the state in the manner contemplated by current state law. As more studies become available and new science is introduced into the policy realm, DSL will incorporate the results in its permit conditions.

IMST Conclusion: *Indeterminate*. It appears that DSL is uncertain as to the intent of this recommendation. The primary idea behind developing sediment budgets and bed load transport rates is to determine the amount of aggregate that is available for extraction over time and

location that will not negatively affect the aquatic ecosystems or future aggregate extractions. Gravels and other sediments are temporarily stored within river systems in gravel bars, floodplains, and terraces. Changes in land uses (increase or decrease in erosion), bank stabilization, gravel mining activities, and upstream dams alter sediment transport and supply rates. Sediments move down stream at varying rates and are deposited at different locations. If left instream, the sediments are available for re-transport and deposition further down stream. If excessive aggregates are removed from an upstream location it may have significant impacts on locations further downstream. Bed load deposits buffer the bed from erosion. Decreased sediment loads lead to bed erosion followed by excessive bank erosion, bed incision, or both. This can damage aquatic and riparian ecosystems and undermine bridge footings and other waterway infrastructures.

Recommendation 4. DSL should track the actual amount of aggregate removed by permit holders.

DSL Response: DSL indicates that the agency has not been consistent in requiring this data in the past, but it is now DSL's present practice to require operators to submit data on the amount of material they have removed. DSL also applies certain standard conditions for bar scalping authorizations statewide to assess recruitment and removal of gravels. This is in addition to the removal surveys (conducted by a registered surveyor) required within 30 days before operations begin and immediately after completing the season's removal activity.

IMST Conclusion: *Adequate.*

Recommendation 5. DSL, in cooperation with ODFW, should assess the cumulative impacts of aggregate mining on streams with declining salmonids.

DSL Response: DSL wrote that according to ODFW, when that agency reviews a permit application for instream gravel it considers whether or not the stream contains spawning, rearing and feeding habitat for sensitive, threatened, or endangered fish species and they consider a sediment budget. ODFW also does not typically support gravel removal in any specific area where salmonids spawn. Comments that DSL has recently received from ODFW regarding gravel removal project, particularly in the Willamette River system, have reflected the IMST's recommendations to evaluate cumulative impacts, sediment budget, and effectiveness monitoring of aggregate removal on a basin scale prior to issuing site-specific permits.

IMST Conclusion: *Indeterminate.* The original IMST recommendation explains

“Cumulative effects include the documentation of current conditions, how past activities may have affected conditions, what other activities are occurring in the reach or basin affecting the operation site and determining how these may interact with a proposed activity. Monitoring of cumulative effects may include short-term monitoring of caged fish during the mining activity, long-term aquatic population trends in the affected reaches, and assessment of aquatic life (macroinvertebrates, aquatic algae and macrophytes and all fish species (not just salmonids). To increase the effectiveness of DSL's resource management this recommendation should be applied to all regulated activities including placer mining and fill operations.” (Page 15)

While it is encouraging that ODFW is taking these ideas into consideration when it comments on permit applications, neither agency has actually conducted, or to our knowledge planning to conduct, an assessment of cumulative effects within any particular basin.

Recommendation 6. DSL should increase the technical expertise of geomorphology and hydrology within the agency.

DSL Response: DSL agrees with the recommendation and indicates that if sufficient funding were available the agency would increase the department's expertise in fluvial geomorphology. Such expertise is "essential" to examine how removal-fill operations may affect channel morphology. Adding this expertise to DSL's staff resources would also help the department to evaluate basin-scale and cumulative impacts. In future revisions to DSL's Strategic Plan, DSL will consider this recommendation again.

IMST Conclusion:

- *Adequate.* Initial response is positive.
- *Indeterminate.* The overall outcome is unknown. DSL indicates that if the funding was available DSL should increase the department's expertise in this area, however, it is not clear if DSL requested funding from the legislature for such a position in either the 2003-2005 or 2005-2007 state budget cycles.

Recommendation 7. ODFW and DSL should identify critical salmonid migration routes not currently protected under the *Essential Indigenous Salmonid Habitat (ORS 196.810(b); OARS 141-102-0000 thru 0040)* designation where impediments to migration may be occurring due to removal-fill activities.

Recommendation 7a. The Land Board and DSL should provide protection for critical salmonid migration routes identified by ODFW and DSL.

DSL Response: DSL indicated that the Essential Indigenous Salmonid Habitat (ESH) designation included spawning, rearing and migration corridors. Current law does not allow stream segments identified solely as migration corridors to be designated ESH. Additionally fish passage obstructions are prohibited by law. Fish passage problems are also being investigated by the state as part of the Oregon Coastal Coho Assessment (draft report prepared by Liz Dent, Oregon Department of Forestry).

ODFW Response: None received to date

IMST Conclusion: *Indeterminate.* The intent of this recommendation was not to look for physical blockages to migration such as poor culverts or permanent/temporary dams. The IMST requests that DSL reconsider this recommendation from the perspective of removal-fill activities. As was stated within the IMST original letter report:

"Juvenile migration may be impeded by physical, chemical, and thermal conditions. Returning adults passing through areas with removal/fill activities require sufficient holding and resting sites. Habitat modification from dredging, bar scalping, or fill

activities may change migration patterns, simplify habitat, increase predation rates, and affect rearing potential in these rivers.” (Page 15).

Recommendation 8. DSL and ODFW should develop an effectiveness monitoring program to determine if permit conditions under the Removal-Fill Law and General Authorizations maintain and protect salmonid fish habitat including gravel substrate, fish populations, and riparian conditions.

ODFW Response: None received to date

DSL Response: DSL indicates that they have approached ODFW on ways that the two agencies could implement this recommendation. Talks are continuing between them and DSL will report back to the IMST periodically to the IMST on their progress.

IMST Conclusion: Adequate. Initial response is positive.

Recommendation 9. The State Land Board and DSL should develop an adaptive management process that is linked to the effectiveness monitoring program.

DSL Response: DSL referred the IMST to response they made for Recommendation 8.

IMST Conclusion: Adequate. Initial response is positive.

Recommendation 10. DSL should incorporate both the technical aspects of the 1995 report, *Gravel Disturbance and Impacts on Salmonid Habitat and Stream Health*, prepared by the Oregon Water Resources Research Institute [OWRRI] into their operations and policies, and the recommendations in this OWRRI report.

DSL Response: DSL previously responded to the IMST recommendations in the OWRRI report and commented on an earlier draft of IMST’s July 31, 2002 letter report. This letter and previous responses constitute DSL’s comments on IMST Recommendation 10. These responses are lengthy and not summarized here.

In addition, DSL staff present at the April 27, 2005 IMST meeting indicated that the agency has made more progress in addressing the recommendations made in the 1995 OWRRI report.

IMST Conclusion: Adequate.

**IMST's Evaluation of Responses to Recommendations made in:
Recovery of Wild Salmonids in Western Oregon Lowlands
Technical Report 2002-1**

Evaluation of responses to recommendations by other state agencies were included in IMST's Administrative Report 2005-1 and not repeated here. At the time the 2005-1 report was issued, responses had been received by the Oregon Plan Core Team and the Division of State Lands (DSL) but had not yet been fully evaluated by the IMST. The evaluations of these responses are below.

Recommendation 1. The Core Team of the Oregon Plan for Salmon and Watersheds should develop and implement a landscape approach to manage salmonid habitat in western Oregon lowlands.

Core Team Response: The Core Team indicated that the group is coordinating an approach for assessing the implementation of the Oregon Plan within the North Coast ESU and over time similar assessments will be undertaken in other ESUs. The assessments will allow the development of landscape approaches for addressing habitat issues, in particular, it will aid in defining restoration and protection priorities based upon a landscape scale. The response also included a description of how ODFW's Native Fish Conservation Plan will incorporate a landscape framework for salmonid recovery.

The Core Team stated that group does not have authority or resources to implement additional actions that may require policy changes or additional budget resources. The Core Team added that the specific element recommended by the IMST to incorporate principles of landscape ecology in salmonid habitat management at both site-specific and landscape level by integrating cumulative impacts into management decisions is not within the authority or policy scope of the Core Team. Nonetheless, an evaluation by the IMST of the scientific basis and methodologies to assess cumulative effects would be useful. This evaluation should include a review of the related scientific information and assessing the pros/cons, limitations, and costs of the different available methods.

IMST Conclusion: *Indeterminate.* The Core Team's response indicates a willingness and intent on the part of the agencies to adopt a landscape approach as recommended by the IMST, but does not discuss all of the components of the IMST recommendation. The response *does* address, at least in part, elements of the IMST's recommendation regarding:

- Prioritization and assessment of protection and restoration measures,
- Integration of present and future timeframes, and
- Improved coordination among agencies and other entities.

Important components of the IMST's recommendation that were *not* discussed in the response include:

- Consideration of historic watershed conditions and function as a reference point for comparison of current and desired future conditions, and
- Integration of information about the linkages between fish habitat requirements and landscape patterns into management decisions.

Both of these elements of the IMST recommendation are foundational to achieving the landscape view that Recommendation 1 is targeted at.

In some cases the response indicates that agencies intend to do assessments, make plans, and set priorities, but it is too early to tell whether these measures will have the intended effect. The Native Fish Conservation Policy is a good example of an excellent plan that is anticipated to contribute significantly to the recovery of salmonids, but for which more time and monitoring information are needed to demonstrate validity of assumptions and ability to achieve results.

The Core Team's response also indicates that "integrating cumulative impacts into management decisions is not within the authority or policy scope of the Core Team". It would be helpful to know 1) whether the Core Team agrees in principle with the basic recommendation; and 2) what further actions or initiatives the Core Team might propose to the State in order to ensure the proper resources, authorities and policies to implement the recommendation are in place. The IMST also notes the Core Team's statement that the agencies would find a scientific evaluation of cumulative effects concepts and methods useful, and will add that to the IMST's list of potential work plan items for future discussion.

Recommendation 2. The Core Team of the Oregon Plan should develop and implement a statewide riparian policy and plan that provides for proper function and condition of riparian areas in Oregon.

Core Team Response: In general, the Core Team agrees with Recommendation 2. However, the response indicated that riparian protection needs to reflect a mix of social, environmental, and economic considerations based upon science and application of protection measures consistent with primary objectives for various ownerships and land uses. The Governor's Natural Resources Office and the Core Team developed the Statewide Riparian Policy to provide direction to agencies. In 2002, Governor Kitzhaber requested that each state agency review the sufficiency of their riparian programs and to review the agency's existing statutory authorities to determine if they allow the agency to carry out the Riparian Policy; if the statutory authorities are not adequate to report to the Governor what statutory changes are needed; and if statutory authorities are adequate the agencies were to review existing rules and policies to determine if they are consistent with the Riparian Policy and if they are not to report inconsistencies to the Governor. If rules and policies are not consistent with the Riparian Policy, agencies were to formerly consider implementing measures necessary to make the agency's programs, rules, and policies consistent with the Riparian Policy.

IMST Conclusion: *Indeterminate*. The IMST notes that the Core Team states that they are in general agreement with this recommendation, but the response lacks specific information that would help the IMST evaluate 1) to what extent the Statewide Riparian Policy (SRA) achieves consistency in riparian management as appropriate among agencies and geographically across the state; 2) to what extent the SRA itself addresses the elements offered in Recommendation 2 for consideration in a statewide policy; and 3) what actions, initiatives, or conclusions have followed from the adoption of the SRA, that might demonstrate progress toward meeting the recommendation. The Core Team response letter refers to an "Appendix A", which may contain the needed information, but Appendix A was not attached to the Core Team letter sent to the IMST.

Recommendation 3. The Core Team of the Oregon Plan should develop a statewide policy and plan for management of large wood in and near streams and estuaries.

Core Team Response: The response indicated the Core Team agrees with Recommendation 3. State agencies have worked with the Legislature and interested publics to develop processes and procedures to protect, maintain, and improve large wood management across stream, river, and estuary systems statewide. Past efforts lead to House Bill 2939 which failed to pass the 2001 Legislature, however, The Governor’s Natural Resources Office and state natural resource agencies continue to work with landowners and the Legislature to develop a comprehensive statewide large wood policy. The Core Team noted that some elements of a state wide policy are in place and interagency standards have been adopted to assess the need for, condition and methods for placement of wood into streams as part of restoration efforts.

IMST Conclusion: *Adequate.*

Recommendation 5. The Division of State Lands (DSL) should reconnect main river channels to off-channel areas and floodplains to increase available lowland habitat for salmonids.

DSL Response: DSL indicated that the agency’s ability to implement this recommendation is through the following mechanisms:

1. **Compensatory mitigation plan approval** – Applications for removal-fill permits involving waterway or wetland impact are required, in most cases, to include a compensatory mitigation plan. Wetland mitigation plans must demonstrate that the mitigation will replace wetland functions lost or diminished at the impact site. Compensatory mitigation plans for waterway (non-wetland) impacts are expected to be “in-kind”, e.g., a proposed project resulting in disconnection of channels from floodplains or off-channel areas should, where practicable, be offset by a mitigation plan that proposes reconnection elsewhere.
2. **Fish habitat enhancement General Authorization** – Removal of in-water structures such as dikes, dams and tide gates that impair floodplain or off-channel connectivity are potentially eligible project types for this streamlined authorization process.
3. **DSL grants for wetland restoration and enhancement projects** – DSL maintains the Oregon Wetlands Mitigation Bank Revolving Fund Account. Criteria for funding stream-related projects include stabilization of stream banks by bioengineering, fish habitat construction, stream re-meandering, native planting, etc.
4. **Submerged and submersible lands management program** – Through this program DSL could coordinate with ODFW and local watershed councils to assess selected DSL-managed submerged and submersible lands for restoration project opportunities where such projects would not otherwise impair DSL’s fiduciary obligations.

IMST Conclusion: *Adequate.*

Recommendation 18. The Division of State Lands (DSL), Water Resources Department (OWRD), Oregon Department of Fish and Wildlife (ODFW), and Oregon Department of Transportation (ODOT) should reestablish and maintain natural fish passage for juveniles and adults in lowland stream systems.

DSL Response: DSL responded to recommendations in an April 15, 2005 letter, however it appears that this recommendation was overlooked.

IMST Conclusion: Responses that have been received by the IMST from OWRD, ODFW, and ODOT were concluded to be adequate. Other correspondence and interactions with DSL suggests that they are also adequately working toward this recommendation.

Recommendation 19. Division of State Lands (DSL) and Oregon Department of Fish and Wildlife (ODFW) should protect and restore hydrologic function and salmonid habitat in freshwater and tidal wetlands.

DSL Response: DSL referred the IMST to the above response they made to the Lowland Report Recommendation # 5 and to the Temperature Report Recommendation # 7.

ODFW Response: ODFW notes that ODFW does not have a regulatory role regarding freshwater and tidal wetlands. By statute, the Department does review and comment on regulatory issues affecting these resources, and acts in a technical advisory role. ODFW also assists private landowners to secure funding, negotiate permits, and assist with construction and deconstruction of structures as need for restoration.

IMST Conclusion:

- *Adequate.* Responses by the agency have been positive.
- *Indeterminate.* While ODFW indicates willingness to work with DSL they do not indicate how this cooperation will occur and how ODFW would help DSL determine priority areas. ODFW has the technical expertise on salmonid requirements that DSL does not have, therefore interagency cooperation and collaboration is critical for the State of Oregon to improve conditions in fresh water and tidal wetlands to aid salmonid recovery. DSL does have several tools for achieving this recommendation however DSL did not indicate how effective the mitigation practices are at maintaining the current function present in freshwater and tidal wetlands or how often function has been restored. It is not clear that either agency has a method for determining if wetlands are functioning as a “healthy” ecosystem.

**IMST's Evaluation of Responses to Recommendations made in:
Oregon's Water Temperature Standard and its Application: Causes, Consequences, and
Controversies Associated with Stream Temperature
Technical Report 2004-1**

Evaluation of responses to recommendations by other state agencies were included in IMST's Administrative Report 2005-1 and not repeated here. At the time the 2005-1 report was issued, responses had been received by the Oregon Plan Core Team and the Division of State Lands (DSL) but had not yet been fully evaluated by the IMST. The evaluations of these responses are below.

Recommendation 7. IMST recommends that Division of State Lands (DSL) and Oregon Department of Agriculture (ODA) should emphasize and implement programs to restore wetlands for use as natural water storage systems.

DSL Response: DSL listed and described several mechanisms the agency has to address these recommendations. These are only listed here for brevity:

1. Compensatory Wetland Mitigation Plan Approval.
2. Wetland Restoration and Enhancement General Authorization.
3. DSL grants for wetland restoration and enhancement projects.
4. Wetland bank review and approval process
5. DSL's rangeland management program (DSL owned lands; 640,000 acres in eastern Oregon)
6. DSL-ODA Memorandum of Agreement (in progress) to better coordinate procedures and responses to work in wetlands, streams, and other waters on agricultural lands.

ODA Response: ODA responded that it lacks authority for wetland development, however, ODA does recognize the role wetlands play within watersheds. Members of the agricultural partnership (i.e. USDA's Natural Resources Conservation Service and Farm Service Agency, and soil and water conservation districts) have a direct responsibility for this area and the department supports their efforts in this area.

IMST Conclusion:

- *Adequate.* DSL's initial response is positive.
- *Indeterminate.* The effectiveness of the mechanisms DSL listed in the agency's response is unknown.
- *Intermediate.* The IMST disagrees with the state role ODA has in protecting and restoring wetlands. While ODA lacks DSL's authorities in restoring wetlands, the agency does have responsibilities to protect water quality under SB 1010. Wetlands are an important component in maintaining water quality within watersheds. The recommendation says the agencies "should emphasize and implement programs". ODA is in a key position, as is the Soil and Water Conservation Commission to educate the agricultural community about the importance of wetlands in watershed health and in enhancing water quality. Where the agency may not be able to implement programs they can advocate the need for programs and review potential programs developed by federal and state agency partners.

Addendum to: IMST's December 30, 2005 review of ODFW's draft *Oregon Native Fish Status Report* and March 18, 2005 review of the State of Oregon's draft *Viability Criteria and Status of Oregon Coastal Coho*

Recommendation 1. The Independent Multidisciplinary Science Team (IMST) recommends that the Oregon Department of Fish and Wildlife (ODFW) implement probabilistic surveys of key native fish, or Species Management Units, statewide. Such surveys would be similar to those conducted by ODFW for coastal coho salmon and desert redband trout, and by Idaho Department of Fish and Game (IDFG) for Yellowstone cutthroat trout, bull trout, and redband trout.

ODFW Response: ODFW agreed with the recommendation and has been working to expand the agency's use of probabilistic surveys to monitor various fish species within Oregon including three coho salmon ESU's, steelhead juveniles and redds, Lahontan cutthroat trout, bull trout, and redband trout. In cooperation with the Confederated Tribes of the Umatilla Indian Reservation, ODFW has also submitted a proposal to the Bonneville Power Administration to begin probabilistic surveys of adult steelhead and juvenile salmonids in the Grande Ronde basin. ODFW also indicated that the agency is working closely with the Oregon Department of Environmental Quality to design and implement probabilistic surveys that integrates fish, macroinvertebrate, physical habitat, riparian, and water quality sampling. ODFW staff is also working with stakeholders and management partners to develop recovery plans for listed salmonid species in Oregon and these plans (and other under development) will undoubtedly identify probabilistic surveys as a key monitoring component for each plan.

IMST Conclusions: *Adequate.* The IMST encourages ODFW to continue and expand these efforts and to coordinate their probabilistic sampling with other agencies and entities.