Fact Sheet

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The Atlas Framework

Prioritizing habitat restoration projects that provide the best value for Columbia River Basin fish

Atlas is a dynamic tool for identifying and prioritizing habitat restoration projects. Its premise is that restoration funds should be prioritized based on biological benefit, and that restoration programs should be able to demonstrate that the right work is implemented in the right place.

Atlas answers the following questions:

- What type of restoration and where?
- Why do you do this type of restoration?
- What is the strategy to answer these questions?
- What is the group of stakeholders that will deliver the strategy?
- Did the restoration make a difference?

How does Atlas work?

It begins with local experts using existing research and monitoring data to identify what projects, in which specific stream reaches, will provide the maximum biological benefit for fish. They consider data on the presence or absence of fish in specific stream reaches and at different life stages (e.g., spawning, rearing and migration). They combine the knowledge of how fish are using each stream reach with empirical data about what factors are limiting fish growth and survival there to prioritize stream reaches within a watershed. Then, restoration opportunities are identified and mapped in those stream reaches, based on the characteristics of the landscape, land use and ownership, and historical potential.

Next, project managers are assigned to go out into the community and work with local landowners to find the best balance between what works within local constraints and what will most benefit the fish. The projects may evolve at this stage as landowners and watershed restoration professionals work together to find the projects that are most appropriate and effective. This process yields the Atlas, a refined list of projects that are feasible and provide the greatest biological benefit. Once that list is developed, the final step is to decide which projects to fund based on number and value of project opportunities and the funding available.

The Atlas is a dynamic and interactive tool. It can be updated as knowledge evolves about fish distribution and productivity in a particular area or when sufficient habitat has been restored to provide biological benefit to a critical life stage. The goal is to ensure the most beneficial projects are always on the list.

How does this differ from what the expert panels are doing?

The expert panels, convened by the Action Agencies to support the Federal Columbia River Power System Biological Opinion, review habitat improvement actions like those included in the Atlas and estimate the habitat quality improvements that should result when those

actions are implemented. The expert panel evaluation considers how habitat improvement actions address the factors that limit salmon and steelhead production and survival.

Atlas, in contrast, starts with the limiting factors within a given reach to help define which restoration actions are most beneficial for that reach, as well as specific project opportunities on the landscape that would provide the most biological benefit.

Atlas complements and provides input to the expert panel process. In places where the Atlas has been developed, there is a well-defined and prioritized list of habitat restoration actions for the expert panel to evaluate.

When does it make sense to develop and use a strategy like Atlas?

Atlas can be a comprehensive and rigorous process, so it makes the most sense to apply it where there will be a significant return for the investment to prioritize projects. These areas might include watersheds where there are multiple project opportunities, substantial biological benefits for fish, large financial investments required, or multiple landowners and complex arrangements needed prior to restoration.

Atlas has proven most beneficial to help research and habitat restoration biologists build collaborative relationships. Using the best available research, monitoring and evaluation results to continuously inform restoration decisions helps develop a consensus on project benefits before making the investment. Basing decisions on science and the needs of the fish helps makes the case for restoration priorities.

It does not make sense to develop and implement an Atlas if a similar prioritization effort at the watershed scale has already been implemented (e.g., the Columbia River Estuary, Tucannon, Entiat and Upper Salmon).

In sum, the benefits of Atlas:

- Use of best available science to inform restoration.
- Alignment of priorities.
- Habitat improvement actions to address priority limiting factors.
- Accountability for investment (ratepayer funds).
- Potential to leverage additional investment (cost share).
- Sets the baseline for future adaptive management.

Where has Atlas been implemented?

Catherine Creek watershed in northeast Oregon. See case study, *www.salmonrecovery.gov/Newsroom/Recentstories/AtlasProjectInCatherineCreek.aspx*

Upper Grande Ronde watershed in northeast Oregon.

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Catherine Creek is one of the first Atlas projects in northeast Oregon's Grande Ronde watershed.