PRE-APPLICATION SCREENING MATRIX: A User's Guide

BACKGROUND

The Pre-application screening matrix was developed for potential permit applicants to evaluate whether a pre-application meeting with relevant federal and state agencies representatives would be useful. Pre-application meetings occur prior to submission of a complete application to the U.S. Army Corps of Engineers and Oregon Department of State Lands to elicit early feedback and identify potential hurdles. In some cases such meetings may benefit from broad participation by a range of agencies, while in others focused discussion with only a few agencies is more appropriate.

The principle underlying the Pre-app matrix is that stream or wetland projects that are complex, controversial or have significant impacts need early involvement by state and federal regulatory and resource management agencies. One of the goals of the agencies is that projects should do no lasting harm to aquatic habitat on-site, upstream, or downstream, and that short- and long-term negative impacts will be avoided where possible, minimized to the greatest extent and mitigated where necessary. Each agency or service has its own regulatory authorities and responsibilities, and those authorities will drive final permit decisions.

This User's Guide provides specific guidance on the use and definitions within the Pre-app matrix. Please contact the relevant agencies, listed at the end of this document, if you have additional questions or would like assistance.

Note: *There is no correlation between project impact and habitat benefits – projected project risk is used to determine the level and intensity of project design, review and monitoring.*

EXPLANATION OF THE AXES

The matrix has two axes that illustrate the lowest-impact and regulatory review in the lower left corner to the highest in the upper right corner. Relative project impact indicates the necessary level of technical expertise and regulatory review. Many projects that plot as high impact also provide the greatest benefit to habitat and species.

The horizontal **x-axis** represents the risk to natural resources due to ***project impact potential***. Because the level of impact is associated with inherent sensitivity and natural resource quality, impact along this axis cannot be reduced unless the project site is relocated. Additionally, because of the inherent sensitivity and quality of the project site, long-term effects are more likely to occur on higher-impact projects.

The vertical **y-axis** represents the likelihood of state and federal agency review and permitting due to the ***regulatory environment***. Some disturbance is inevitable when constructing or maintaining projects near or in streams and wetlands; therefore, this axis uses regulatory authority indicators, such as threatened and endangered species, tribal or cultural issues, to assess the estimated level of regulatory review required if the proposed project were implemented. Because the level of review is related to the proposed action, reducing regulatory review on the y-axis is often feasible through project relocation or redesign, using guidance provided in existing nationwide permits or programmatic biological opinions.

Items along the x-axis: Project impact potential

Stream sensitivity and stream type

Source (>10 percent slope)	Transport (3-10 percent slope)	Response (<3 percent slope)	
Bedrock	Colluvial	Alluvial	Incised channel/alluvial fan

The type of stream, or reach, can define the expected proportionate impacts from in-water work. This item can help identify those expected impacts, which would correspond to a proposed project's potential to damage a stream. More potential for damage requires greater review and design effort to make sure the environment is protected during and after project work.

"Source" reaches are dominated by local sediment inputs from hill slopes; "Transport" reaches correspond to supply-limited channel types; and "Response" reaches correspond to transport-limited channel types (Montgomery & Buffington 1998).

The risk of damage to a stream from a project is lowest in Source (colluvial and bedrock) reaches, intermediate in Transport (step-pool and, cascade) reaches, and greatest in Response (plane-bed, pool-riffle and dune-riffle) reaches.

Stream slope, as seen in percentages above, can be used as a surrogate for sensitivity rankings, if sensitivity is not generally known.

Stream sensitivity also includes the potential for disturbance upstream or downstream. An example of upstream disturbance propagation is erosion of the channel bed, creation of a headcut and the migration of this nick point; this process is commonly initiated when artificial grade controls, such as culverts, are removed. This erosion process sets off a series of feedback mechanisms that can cause sedimentation downstream, channel widening, loss of base flows, and other related impacts.

Wetland quality

Prior converted	Degraded	Pristine or unique

The existing quality of a wetland is a consideration for this permit process. Wetlands that have been previously converted for agricultural uses may not be regulated; however, agricultural wetlands still exhibiting wetland hydrology may require a permit if the project proposes to convert them to non-agricultural uses.

Potential impacts to degraded or low-quality wetlands are of less concern to the permitting and resource agencies than potential impacts to pristine, high-quality or rare and unique wetlands. These types of wetlands are difficult to replace or may have historically experienced high losses in some parts of the state, and may include bogs, forested or estuarine wetlands.

Aquatic species

Common or tolerant	Connected	Sensitive or isolated

State and federal regulations protect the full range of aquatic life, although the level of protection is typically determined by the most valuable resource present. Those most valuable resources, which may be sensitive or part of an isolated population, include all endangered species, species managed as fisheries and species that support aquatic food webs.

For specific definitions or questions about the types of species covered in this item, please contact the Oregon Department of Fish and Wildlife: http://www.dfw.state.or.us/

Water quality and quantity

Unimpaired	Impaired	TMDL	Contaminants
No use of water/no need for water right		Point of diversion/change in water right	

Water quality has the potential to be degraded in a number of ways by projects constructed near or in waters of the state. Activities with the potential for high-risk impacts to water quality include those with: the presence of contaminants, a high potential for discharge of contaminants including turbidity, a high potential for long term impacts on water quality including temperature. Activities with the potential for low-risk impacts to water quality include those with: a low potential for discharge, short-term activities and uncontaminated areas.

The scale for water quantity indicates limited risk if there is no use of water, and for groundwater that includes use up to 5000 gallons, and no need for water rights. Projects requiring a point of diversion or change in water rights are considered higher risk than those without use of water or need for a change to existing water rights.

Relative scale of disturbance (stream or mining)

1x	3x	5-7x	10x	20+
< 5000 cubic yards removed		> 5000 cubic yards removed		

This risk element is intended to capture potential effects due to the physical scale of the project.

Potential impacts to stream habitat are evaluated by indexing the scale of the project to the extent of channel disturbance. For instance, if a construction corridor is 75 feet wide across a stream channel that is 150 feet wide, then the disturbance index would be 0.5X; however, if the channel is only 15 feet wide, then the disturbance index would be 5X. The risk is higher for smaller streams because more habitat units, which are also scaled to channel width, would be affected.

For the mining scale, low risk would be a project in which less than 5000

cubic yards of material is removed from the project site. High risk would be a project in which more than 5000 cubic yards of material is removed from the project site.

Items along the y-axis: Regulatory scope

Endangered Species Act

Programmatic		Individual consultation	
or			
No effect	Not Likely to Adversely Affect	Likely to Adversely Affect	Potential jeopardy

The Corps consults with federal services to determine whether and how a proposed project may affect endangered species and their critical habitat, and must ensure that any action it permits will not jeopardize endangered species or result in more than minimal adverse effects to those species. Some projects can be designed to meet the criteria of existing "programmatic" biological opinions. ESA consultation may result in additional permit conditions, or permit denial, if necessary to ensure that the proposed project meets these standards.

U.S. Army Corps of Engineers and Oregon Department of State Lands

Nationwide Permit/general authorization	Regional General Permit/General Permit	Individual permit
< 0.1 acre impact	< 0.1 to < 0.5 acre impact	> 0.5 acre impact

The Corps and DSL use acreage thresholds to determine what type of permit evaluation is necessary. For the Corps, projects affecting less than 0.1 acre of wetlands may not require compensatory mitigation; those affecting 0.5 acre or less may qualify for a Nationwide Permit and those that affect more than 0.5 acre will likely require an individual permit. Some Nationwide Permits, such as NWP Nos. 3 or 27, may be used to authorize more than 0.5 acre of impact.

DSL does not have a minimum threshold below which compensatory mitigation is not required. General authorizations are available for specific activities that will result in no more than minimal impacts. Projects with less than 0.2 or 0.5 acres of impact may be eligible to use state General Permits. If the project is able to use a general authorization or general permit, it will be low of the regulatory scope scale for DSL.

Public interest

Low	Moderate	Significant

This factor relates to how much interest the project has generated from parties other than the applicant or regulating agencies. A rating of low public interest would mean that there has been very little to no involvement to date and none expected. A rating of moderate public interest would mean that there is local interest from neighboring property

owners or community members, or the project has support from the local or regional government. A rating of significant reflects high public interest, such as organized opposition, especially from regional groups; or state, tribal, or federal government interest, either in support or opposition.

Fisheries Issues

Common action	Site-specific design	Experimental
No jump	Six-inch jump	> 1-foot jump, channel spanning structure
No in-water work	Work planned within window	Work planned outside window

One element of project complexity is if the project will affect the passage of fish or create a condition that is likely to strand fish. The more difficult the passage is for fish, the more likely additional actions are needed for mitigation of this risk. The timing of the work and specificity of the design will also increase potential project risk, and offer opportunities for greater oversight by the agencies and services.

Cultural resources

None present	Unknown	Present (known)

This item identifies if cultural or historical resources are known to be present in the identified project area. If known, the type of resources present may require additional or specific project design elements, or involvement of the Oregon State Historical Preservation Office.

During the course of reviewing your project, the Corps or other lead federal agency may consult with interested tribal governments to identify and resolve tribal concerns, which may include, but are not limited to, cultural resource protection.

State and federal agencies and services involved with this project

U.S. EPA – Oregon Operations Office (Portland): http://yosemite.epa.gov/R10/HOMEPAGE.NSF/Oregon/OOO+Contacts
NOAA - National Marine Fisheries Service: http://www.nwr.noaa.gov
U.S. Fish and Wildlife Services: http://www.fws.gov/oregonfwo/
U.S. Army Corps of Engineers (Portland District): http://www.nwp.usace.army.mil/
Oregon Department of State Lands: http://www.oregon.gov/dsl
Oregon Department of Environmental Quality: http://www.oregon.gov/DEQ/
Oregon Department of Geology and Mineral Industries: http://www.oregon.gov/dogami
Oregon Department of Fish and Wildlife: http://www.dfw.state.or.us/