

Questions and Answers on “ Guidance for Using the Oregon Rapid Wetland Assessment Protocol (ORWAP) in the State and Federal Permit Programs”

In June, July and August 2009, the Department of State Lands (DSL) sponsored three 3-day trainings on the Oregon Rapid Wetland Assessment Protocol (ORWAP). The third day of each training was dedicated to discussing how ORWAP results may be used in the state and federal regulatory programs based on the “Guidance for Using the Oregon Rapid Wetland Assessment Protocol in the State and Federal Permit Programs” (guidance document).
http://www.oregonstatelands.us/DSL/WETLAND/docs/orwap_guide.pdf

Some questions could not be fully answered during the trainings and were captured for later response. Following are those questions with answers provided. Where necessary, DSL and U.S. Army Corps of Engineers – Portland District (Corps) staff responses are called out separately.

1. Assuming the other criteria are met on page 3 of the guidance document, if you have wetlands with different, but texturally same, adjacent soil series, can you include multiple wetlands into a single assessment area?

DSL & Corps: *After further consideration, page 3 of the guidance document will be modified to remove “they contain the same predominant mapped soil series” and replace with “they are located within the same land form (e.g., terrace, hillslope, depression)”.*

2. Can the agencies accept a Department of Environmental Quality permit in place of additional compensatory wetland mitigation (CWM) requirements for impacts to water quality and hydrologic storage functions?

DSL: *No because in-perpetuity operation of on-site detention or water quality facilities required by a DEQ permit cannot be reasonably guaranteed and DSL mitigation ratios must still be observed.*

Corps: *The Corps will typically consider storm water facilities as a component of the overall mitigation plan for wetland impacts. However, storm water facilities generally only mitigate for water quality and storage impacts. Mitigation to compensate for impacts to other services/functions will be required.*

3. Where did the percent cover requirements for Willamette Valley wet prairies come from in DSL’s “Removal-Fill Guidelines: Compensatory Mitigation for Non-Tidal Wetlands and Tidal Waters”, March 1, 2009 Draft?
http://oregonstatelands.us/DSL/PERMITS/docs/CWM_RFG_draft.doc A comment was made that they seemed unrealistic even for intact sites. (*Not an ORWAP specific question*)

DSL: *The routine performance standards for wet prairie, as described in the aforementioned Guidelines, were developed by DSL staff based on an idealized condition. Staff is revisiting these routine standards now based on new data informing this topic. The standards will be revised and updated. Please contact Dana Hicks, DSL Mitigation Specialist, at 503-986-5229 for more information.*

4. What was the rationale for using the maximum score for the function and value score in each grouped service, as opposed to using the mean or median score?

DSL & Corps: *The maximum score was used to ensure that averaging did not mask important functions. For example, if a wetland was prime salmon habitat but poor habitat for resident fish, then an average or median calculation would mask or downplay an important ecological service (fish habitat support) being provided by this wetland.*

5. Are there plans to test the assumptions in the regulatory guidance document?

DSL & Corps: *There is no independent testing anticipated at this time. The guidance document is offered as a tool to help interpret ORWAP results within the regulatory framework. Consultants are encouraged to provide feedback on the guide as they try it out. It is anticipated that as "real world" experience is gained in applying the guide, adjustments and updating will be necessary.*

6. Will functional assessments be required for CWM sites already in the monitoring stage?

DSL: *Only if required as a condition of the Removal-Fill Permit.*

Corps: *Not unless an existing permit condition requires a post-construction functional assessment. One could be required as part of a remedial action plan or permit modification, if warranted.*

7. If a public comment on a joint permit application is inconsistent with the results of the ORWAP assessment, will the public comment hold any weight in the permit issuance decision?

DSL: *If the public comment includes explanation, facts or rationale as to why the ORWAP results do not provide an accurate assessment of the impact or mitigation site, then DSL will consider this as part of the decision process and will invite the applicant to respond to the comment.*

Corps: *The Corps must consider all comments received through the public interest review process. Comments would be evaluated and the applicant would be given the opportunity to respond/rebut the comment.*

8. Will ORWAP be required for Mitigation Banks?

DSL & Corps: *ORWAP is not required for mitigation banks though it is encouraged for banks in locations that do not have an approved HGM reference-based method.*

9. Question regarding the number of times that ORWAP would need to be applied for permitting purposes: once for the entire study area as defined by the delineation, a second time for the proposed wetland impact, a third time on the proposed mitigation site if enhancement is being proposed and a fourth time during the monitoring period. Is that DSL's expectation?

DSL: *An applicant may perform the function assessment on all wetlands within the study area (i.e., concurrent with the delineation area and process) or may choose to do so on the proposed wetland impact area, once defined. The former approach may provide better information regarding avoidance and minimization strategies, but is not required. For CWM proposals using permittee-responsible CWM, a functional assessment of existing wetlands within the CWM site that are proposed for enhancement credit (if any) must be included. A functional assessment of the CWM site in its anticipated post-development condition must also be included. A final functional assessment is required prior to release of a permittee-responsible CWM site from the monitoring obligation.*

Therefore, in most cases, DSL anticipates that a permit application for wetland impact and permittee-responsible CWM will include two (if CWM by creation or restoration) or three (if CWM by enhancement) functional assessments.

Corps: *The number of times a functional assessment will be required varies depending upon the situation and the need. Generally, the Corps would concur with the requirements imposed by DSL.*

10. Will older versions of ORWAP be made available on DSL's website so that the same version of the protocol that was used at year 0 on the mitigation site can be used at year 5 of the monitoring period?

DSL: *Yes, DSL will create an archive of all retired versions of ORWAP on the DSL web site.*

11. What's the timeline for requiring ORWAP in DSL Rules?

DSL: *DSL is currently formulating a draft Rule that would require using ORWAP in those locations where there is not an approved reference-based HGM method available and the impact is greater than 0.2 acres. This proposal will likely be included in the pending October 2009 public review draft of the Division 85 Rule.*

12. The datasheets (Form OF, F, and S) are password protected, which prevents the user from entering the Date, Site Name, and Investigator. Please fix.

DSL: *The version posted on the DSL website has been fixed to remove password protection.*

13. Guidance is needed on delimiting assessment areas for large linear projects.

DSL: *Please refer to "Removal-Fill Guidelines: Compensatory Mitigation for Non-Tidal Wetlands and Tidal Waters", March 1, 2009 Draft, pp. 13-14 on DSL's website http://oregonstatelands.us/DSL/PERMITS/docs/CWM_RFG_draft.doc for guidance on conducting functional assessments for linear projects.*

14. The graph that Paul Adamus created showing how individual functions and values correlate to one another would be a helpful tool for mitigation design.

DSL: *The correlation tables are provided on pages 59 and 60 of the ORWAP Manual. http://www.oregonstatelands.us/DSL/WETLAND/docs/orwap_manual_v2.pdf*

15. Why does ORWAP use an absolute scale for scoring wetland attributes? Why aren't scores normalized to a 0 to 10 scale?

DSL: *We do not have a statistically valid dataset at this time to do such normalizing. The ORWAP testing process on 220 sites was not developed as a statistically representative sample for normalizing purposes.*

16. If I'm assessing two wetlands on a project site in the Willamette Valley and one wetland is, say, Flats class (HGM reference based method is available) and the other is Depressional class (no HGM reference based method available), do I have to do HGM reference-based functional assessment on the Flats wetland and ORWAP assessment on the Depressional wetland?

DSL & Corps: *If there are multiple wetlands on a site of varying classes that are not both covered by the HGM reference based method, then it is OK to use ORWAP for all the wetlands for the sake of consistency and comparability. This clarification will be added to the next version of the regulatory user guide.*

17. Follow-up to Question #16: If the two wetlands don't pass the test for combining into one assessment, then which of the two functional assessment results do I use to compare to the mitigation proposal?

DSL & Corps: *In the example provided, the two wetlands could be combined so long as the criteria described on page 3 of the ORWAP regulatory user guide are satisfied (and as modified by answer to question #1). Because in-kind replacement is an objective of compensatory wetland mitigation, it would still be DSL's and the Corps' expectation that the CWM proposal would include a proportionate amount of both HGM subclasses being impacted.*

18. Proposed wetland impact sites in urban landscapes may score high on some functions, but they are potentially not sustainable in the long-term. How does sustainability of the wetlands being proposed for impacts factor in to the permit decision?

DSL: *Wetland sites in urban settings will often be more prone to stressors that may cause the wetland's functionality to degrade over time. While this does not negate the requirement for compensatory mitigation and functional replacement of the wetland as it exists today, it may be considered as part of the avoidance and minimization strategy. For example, if there are wetlands on the site with greater and lesser stressor levels, then (all else being equal) proposals that maximize avoidance of lower stress wetlands will be more desirable.*

Corps: *When evaluating compensatory mitigation options, the Corps will consider what would be environmentally preferable. In making this determination, the Corps must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project. Compensatory mitigation projects are to be designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. Additional information can be found at 33 CFR 332.7(b).*

19. What is the difference between values and grouped services as described in ORWAP and the “watershed approach” as described in the federal rule?

Corps: *In the Federal Mitigation Rule, the term “services” is used in lieu of the term “values.” The Federal regulatory program is appropriately focused on protecting “functions” (the physical, chemical and biological processes that occur in aquatic resources) and “services” (the benefits to humans that result from these functions). Ecosystem services is a useful concept for assessing the public interest, an important consideration in the Corps Regulatory Program. Using the concept of “services” also allows the Corps to focus on how the general population benefits from ecological functions, instead of whether potentially affected parties may or may not “value” a particular aquatic resource and the functions it provides.*

In ORWAP, the term “grouped services” is defined as a “roll-up” of individual functions and their associated values organized into thematic categories. Value is defined as the importance or worth of a wetland function to a societal need (see Table 1 in the guidance document).

20. Why shouldn't ORWAP scores be multiplied by the number of wetland acres assessed?

DSL & Corps: *This is discussed in Section 3.3.2 of the guidance document. In summary, such multiplication should not be done because an ORWAP score is not a measure of a wetland's absolute capacity to do a given function on any per unit area. The scores are a relative measure of the wetland's effectiveness in doing the function regardless of size.*

21. How can we predict scores when scores are based on output from 140 questions?

DSL & Corps: *Section 3.3.4 of the guidance document offers one means by using a reference site. Otherwise, the applicant/consultant will need to apply the ORWAP indicator questions to the CWM site in its “as designed” state.*

22. How do you report your ORWAP results if your CWM project has restoration, enhancement, and creation or some combination of these?

DSL & Corps: *Since restoration and creation sites start with an assumed wetland function of 0, they may be treated the same in one assessment. If the CWM site additionally includes enhancement, then an existing condition assessment and expected post-treatment assessment will be necessary to determine the anticipated net functional lift within the enhancement area. The*

functional assessment results from the creation/restoration area and the enhancement area may be combined into a single set of CWM functional assessment scores using a weighted average approach. For example: assume the CWM site is 3 acres of enhancement and 1 acre of restoration or creation. If the Water Quality Support score is 2 for the enhancement area (net lift score) and 6 for the restoration/creation area, then the weighted average Water Quality Support score for the total CWM site would be 3. This does not violate the “no multiplying rule” on page 8 of the guidance document because acreage is only being used as a means to establish a relative weighting between the two Water Quality Support scores, and not to influence the calculation of the Water Quality Support score for either portion of the CWM site.

23. If I get a rating of 7 for the impact site and only a 6 for the CWM site, I understand this is acceptable, but is this considered a net loss?

DSL & Corps: *This is not considered a net loss of function (or value) since it is within the margin of error defined by repeatability testing of the ORWAP method.*

24. Do we need to do ORWAP on a wetland bank if purchasing bank credits for CWM?

DSL & Corps: *For CWM proposals using mitigation bank credits, functional assessment of the bank or site is not required of the applicant. An applicant proposing to go a bank may choose to provide a summary of the bank’s functional assessment result as a means of demonstrating compliance with the DSL principal objectives for CWM (OAR 141-085-0680), however, this is not required.*

25. If improvements on a mitigation site do not meet DSL regulatory rule for enhancement but result in a functional lift, could this be used to support a lower score?

DSL: *It is possible. If the mitigation proposal otherwise meets the DSL mitigation ratios, but falls short of achieving functional replacement, then you could—and are encouraged—to consider additional area (adjacent or additional sites) to help the overall mitigation achieve functional replacement. To use the questioner’s example: adding a solely vegetative enhancement component to the CWM, while not eligible for the DSL enhancement ratio, could be used to boost, say, the Terrestrial Support score for the overall mitigation effort and may be used accordingly with the following caveats:*

- *If used in this way, DSL expects performance standards to be established for the vegetative enhancement area and for this area to be made part of the site protection and annual site monitoring.*
- *Vegetative enhancement still needs to make good ecological sense: it should not be just an unsubstantiated Cowardin class conversion or an otherwise non-sustainable effort.*

26. Will we have to do 4 or 5 assessments for each project (impact site before and after, CWM site before and after, and with 5 year monitoring plan)?

DSL: *See response to Question #9.*