



# Focus on Best Available Science for Wetlands

from Ecology's Shorelands and Environmental Assistance Program



The Department of Ecology is coordinating the development of a two-volume document that summarizes the current scientific information on freshwater wetlands and provides guidance on protecting and managing wetlands for local governments to consider when making updates to their growth management plans, policies and regulations. The Department of Fish and Wildlife (WDFW) is co-sponsoring both volumes of the document and is providing technical support.

Although the primary audience is local governments, both volumes also will be valuable to anyone who has an interest in protecting and managing wetlands. This focus sheet is intended to provide background information on the best available science project, describe the current status of the project, and provide answers to some frequently asked questions.

## Background

A 1995 amendment to the Growth Management Act (GMA) required that all cities and counties in Washington include the best available science when developing their critical-area policies and regulations, which cover wetlands. However, many local governments adopted their current plans and ordinances prior to the amendment, and some did not incorporate science-based standards in their regulations. The GMA also required all local jurisdictions to review and revise their policies and regulations by September 2002.

Local jurisdictions began to review and revise their policies and regulations; however, there was no comprehensive synthesis or interpretation of the best available science for wetlands. Many local jurisdictions lacked the resources to conduct a comprehensive evaluation of available scientific information on wetlands and interpret how to use that information. Ecology and WDFW staff were asked by many local jurisdictions to help compile and analyze the best available science for wetlands. As a result, in October 2001, Ecology and WDFW initiated this project to help local governments incorporate the best science available when revising their critical-area ordinances.

The 2002 legislature adopted SSB 5841, which delayed the mandatory GMA updates. The new deadlines are staggered, with GMA updates for more-urbanizing counties due on or before December 1st, 2004. Deadlines for the remaining counties are spaced over the next three years (December 2005-December 2007).

## Current Status and Timelines

### Volume 1

---

In August 2003, Ecology and WDFW produced a draft of Freshwater Wetlands in Washington State: Volume 1 - A Synthesis of the Science (Ecology publication # 03-06-016) for peer and public review.

Volume 1 contains a synthesis of the literature pertaining to:

- Freshwater wetlands in Washington and how they function.

- The effects of human activities on freshwater wetlands and their functions.
- The tools used to protect and manage freshwater wetlands and their functions.

The tools include the science regarding buffers, rating, compensatory mitigation, and non-regulatory options. Volume 1 also explains the methods used to obtain and synthesize the literature. The draft of Volume 1 can be found on the project Web site at [http://www.ecy.wa.gov/programs/sea/bas\\_wetlands/vol1-download.html](http://www.ecy.wa.gov/programs/sea/bas_wetlands/vol1-download.html).

During the public review period for Volume 1, Ecology received comments from 31 individuals and organizations. The project team is working to respond to the comments, incorporate the reviewers' suggestions where appropriate, and obtain additional literature sources. A final version of Volume 1 will be completed in fall 2004. The project's Web site contains:

- All the comments received, in their original form.
- A summary of the responses made to a questionnaire that accompanied the draft.
- A short synthesis of the comments, with the plan for responding to them.

## **Volume 2**

---

Volume 2, *Wetlands in Washington State: Volume 2 - Guidance for Protecting and Managing Wetlands* (Ecology publication #04-06-024), contains guidance for managing and protecting wetlands, based on the synthesis of the science presented in Volume 1. The document is geared primarily toward local governments to use in revising local policies, plans and regulations and establishing non-regulatory approaches to protect wetlands.

The following key themes or messages are highlighted in Volume 2:

- A site-by-site approach to managing wetlands is failing to effectively protect wetlands.
- To effectively protect wetlands and their functions, we must also understand and manage the connections between environmental processes in the larger landscape and how wetlands function.
- To better protect and manage wetlands, an approach that incorporates landscape analysis at different geographic scales of application is needed. The geographic scales include cross-jurisdiction within the area being managed and at the site itself.
- The approach can be implemented using available tools combined with the landscape analysis. The existing tools include:
  - Local plans and codes, such as comprehensive planning, sub-area planning, zoning codes, etc.
  - Local regulations, such as critical-area ordinances, stormwater manuals, clearing-and-grading regulations, etc.
  - Restoration and preservation on a programmatic and individual, voluntary basis.
  - Incentives through tools, such as a public-benefit rating system to encourage voluntary conservation.

The draft of Volume 2 can be found on the project Web site at [http://www.ecy.wa.gov/programs/sea/bas\\_wetlands/index.html](http://www.ecy.wa.gov/programs/sea/bas_wetlands/index.html).

Public comments will be accepted through September 20th, 2004, for the draft of Volume 2.

Comments should be submitted to:

*Dana L. Mock*  
*Department of Ecology*  
*PO Box 47600*  
*Olympia, WA 98504-7600*  
*(360)407-6947*  
*dmoc461@ecy.wa.gov*

The final versions of both documents are scheduled to be completed this fall (2004).

## **Frequently Asked Questions**

### **What is best available science (BAS)?**

---

A 1995 amendment to the Growth Management Act (GMA) required that all cities and counties in Washington include the best available science when developing their critical-area policies and regulations, which cover wetlands. The GMA does not define BAS, but the Department of Community, Trade and Economic Development (CTED) adopted guidelines in 2000 that provided clarification (chapters 365-195-900 through 925 WAC). The guidelines describe what constitutes BAS and how local governments should identify, evaluate and include it in their critical-area policies and regulations. Sources of best available science include research, monitoring, inventory, survey, modeling, assessment, synthesis and expert opinion.

### **What kind of information does the draft of Volume 1 contain?**

---

Volume 1 summarizes the scientific literature on freshwater wetlands. More than 17,000 citations were evaluated, and more than 1,000 were selected and summarized as being relevant to the management of Washington's wetlands. The document reports what the literature says about how wetlands in Washington function, how human activities affect wetland functions and how effectively specific management tools, such as buffers, protect wetland functions from harmful human activities.

### **What kind of information does the draft of Volume 2 contain?**

---

Volume 2 contains guidance for protecting wetlands and managing the effects of development and other human activities based on the information synthesized in Volume 1. The guidance includes recommendations for using information generated from an analysis of the landscape to plan for future land uses, establish policies used to revise regulations and develop non-regulatory approaches. It provides options for commonly used regulatory measures such as buffers and compensatory mitigation. The state wetland rating systems for Eastern and Western WA were developed concurrently with Volumes 1 and 2 and are recommended in Volume 2 in relation to specific management recommendations. Text is provided in Volume 2 that can be used to craft regulatory language.

### **Who was involved in this project?**

---

The Department of Ecology coordinated the project, and the Department of Fish and Wildlife provided technical support to the project. The U.S. Environmental Protection Agency provided grant funds to both agencies. The consulting firm of Sheldon and Associates, Inc. conducted the literature review and helped develop drafts of both volumes.

Local government staff (and state agency staff who work with them) were asked to provide advice about the scope and format of the document. In addition, a Local Government Wetlands Advisory Team (LGWAT) composed of city and county planning staff was formed to provide feedback during

the development of Volume 2. Ecology staff also met with environmental and business groups during the development of Volume 2.

### **Are local governments required to use the information in Volume 1 or the recommendations in Volume 2?**

No. Local governments are required by the GMA to “include the best available science.” They may conduct their own evaluation of the scientific literature and/or rely on the information in Volume 1. The GMA also requires local governments to “protect critical-area functions and values.” Volume 2 contains the state agencies’ recommendations for the most effective ways to protect wetland functions and values. We encourage local governments to consider these recommendations, but they are not required.

### **How much weight do CTED and Ecology expect local governments to give to Ecology's wetlands BAS document?**

CTED and Ecology recommend that local jurisdictions give substantial weight to Ecology’s wetlands BAS document as it is comprehensive, thoroughly researched and has been peer reviewed. Local governments can do their own BAS review and use any and all science that meets the GMA criteria for BAS. However, according to the Washington Court of Appeals, jurisdictions “cannot ignore the best available science in favor of the science it prefers simply because the latter supports the decision it wants to make.” (Honesty in Env'tl. Analysis & Legislation (HEAL) v. Cent. Puget Sound Growth Mgmt. Hrgs. Bd., 96 Wn. App. 534 (1999).)

### **When will the state wetland rating systems for Eastern and Western WA be completed?**

The final versions of the rating systems are currently available. The rating systems were revised to incorporate the best available science on wetland functions. As the previous systems did, the new rating systems place wetlands in one of four categories. Many of the management recommendations in Volume 2 are designed to be used in conjunction with the new rating systems. Copies of the rating systems can be obtained by contacting the Department of Ecology Publications Department (360-407-7472) and requesting publication #04-06-015 (Eastern version) and/or #04-06-025 (Western version). Another option is to read or download the files from the Web site at: <http://www.ecy.wa.gov/programs/sea/wetlan.html>.

### **Will the guidance in Volume 2 change substantially in the final version of the document?**

We cannot anticipate the feedback we will receive during the public review of the draft document. However, given the substantial amount of comments we have received in the development of Volume 2, it is possible that the recommendations will not change substantially.

### **Where can I get technical assistance while I am developing wetland protection programs?**

Both before and after the guidance is released, Ecology staff are available to work with local jurisdictions to develop effective wetland protection programs that include the best available science. Go to this Web site to get the name of the wetland specialist for your region (<http://www.ecy.wa.gov/programs/sea/wetlandcontacts.htm>) or contact Donna Bunten, Ecology’s CAO review coordinator, at 360-407-7172 or [dbun461@ecy.wa.gov](mailto:dbun461@ecy.wa.gov).

In addition, once the final documents are distributed, Ecology plans to conduct training for local governments. Information on training will be posted on the project Web site and distributed to our mailing list.

## **Which local jurisdictions are required to meet the December 2004 GMA deadline for updating their critical-area policies and regulations?**

RCW 36.70A.130(4) sets the deadlines for each county and its cities to complete the first seven-year update. The following counties and their cities are required to update their critical-area policies and regulations in 2004 (and every seven years thereafter): Clallam, Clark, Jefferson, King, Kitsap, Pierce, Snohomish, Thurston, and Whatcom.

2005: Cowlitz, Island, Lewis, Mason, San Juan, Skagit, and Skamania counties and the cities within those counties.

2006: Benton, Chelan, Douglas, Grant, Kittitas, Spokane, and Yakima counties and the cities within those counties.

2007: Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grays Harbor, Klickitat, Lincoln, Okanogan, Pacific, Pend Oreille, Stevens, Wahkiakum, Walla Walla, and Whitman counties and the cities within those counties.

## **Will these documents be updated on a regular basis to reflect new scientific information?**

Ecology does not have the funding to regularly update these documents. However, as new scientific information becomes available, we will attempt to communicate the new information to local governments. We will pay close attention to new information that has significant implications for the management recommendations.

## **How can I stay informed about the status of this project?**

Ecology maintains a Web page at [www.ecy.wa.gov/programs/sea/bas\\_wetlands](http://www.ecy.wa.gov/programs/sea/bas_wetlands) to distribute news about the project and will post the document there after it is completed.

Also, a mailing list has been created to keep interested citizens informed on several Ecology wetland-related projects and ongoing efforts to improve wetlands protection in Washington. To be added to the mailing list for Ecology Wetlands Updates, contact:

*Dana L. Mock  
Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600  
[dmoc461@ecy.wa.gov](mailto:democ461@ecy.wa.gov)  
(360)407-6947*

*This document is available online at <http://www.ecy.wa.gov/biblio/0406026.html> If you require this document in alternative format, please contact Ecology's SEA Program at (360) 407-6096 (Voice) or 711 or 1-800-833-6388 (TTY).*