



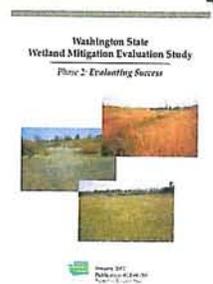
Guidance on Choosing Mitigation Sites Using a Watershed Approach

Guidance is being jointly developed by:
Washington Department of Ecology
U.S. Army Corps of Engineers, Seattle District
U.S. Environmental Protection Agency, Region 10

Presentation for Mitigation That Works Stakeholders Forum
Meeting 6, April 15, 2008

Historical Perspective

- Low mitigation success rate
- History of over-emphasizing need for on-site mitigation
- Last 10-15 years have seen rise of a watershed approach



Wetland Mitigation in Washington State
Part 1: Agency Policies and Guidance



National Wetlands
Mitigation Action Plan

Successful Mitigation?

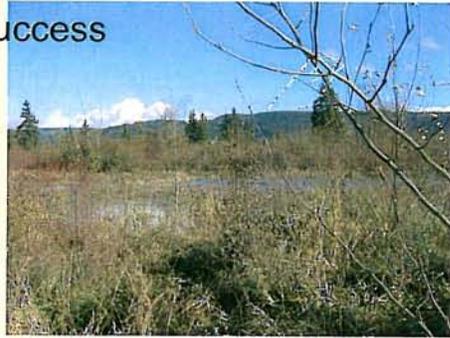


Need for Guidance

- Despite movement in policies, we haven't seen much change in practices
- Need to provide tools to implement watershed approach
- Need to communicate to the public that regulatory agencies are together in supporting watershed approach – policy level coordination
- Need to get consistency among project managers who review permits – project level coordination

Goals of Guidance

- Define watershed approach
- Shift focus of mitigation to restoring watershed processes
- Provide practical tool
- Improve mitigation success



Contents of Guidance

- Guidance Goals and Need
- Emphasizing Key Points on Mitigation Site Selection
- Following One of Two Paths
- Identifying an Appropriate Watershed Plan
- Lacking an Appropriate Watershed Plan
- Using the Charts – 3 flow charts
- Finding Other Resources
- Definitions

Mitigation Sequencing Using a Watershed Approach

- Urban wetlands are not sustainable
- Mitigation in urban watersheds is not successful
- We must decide when it is preferable to avoid wetlands or to fill them and mitigate
- Is driven by potential of sustainability – brings us back to watershed condition



Key Points of Guidance

- Mitigation should be located to restore watershed processes as much as possible
- We need to do watershed assessments/plans at regional scale – not project scale
- Assessments/plans should target priority wetland restoration areas and lay out goals for those areas
- When watershed assessment is not available for an area, can use simpler tools that are grounded in same principles

More Key Points

- On-site mitigation is appropriate when it addresses watershed processes and shows potential for being successful and sustainable
- Watershed approach does not change need to avoid impacts to irreplaceable wetlands
- Mitigation programs (e.g., banks, fee-in-lieu, programmatic mitigation) should be based on a watershed approach
- Use of approach may result in out-of-kind mitigation when it is ecologically preferable to in-kind – watershed plan prioritizes needs

Restore Process and Functions Follow



What Makes a Good Watershed Plan?

- Identifies areas in watershed that are important to ecological processes
- Assesses level of alteration of processes
- Identifies priority areas for restoration and protection
- Sets restoration goals for priority areas
- Discusses types of restoration actions that could address process restoration
- Is not focused on a single species

One Example of a Watershed Assessment Method



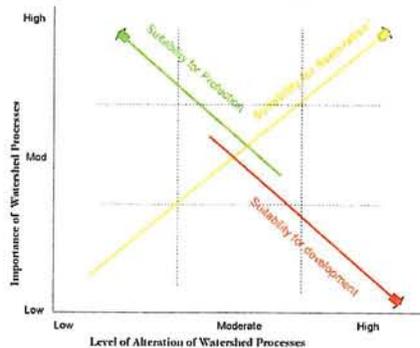
Protecting Aquatic Ecosystems:

*A Guide for Puget Sound Planners
to Understand Watershed Processes*



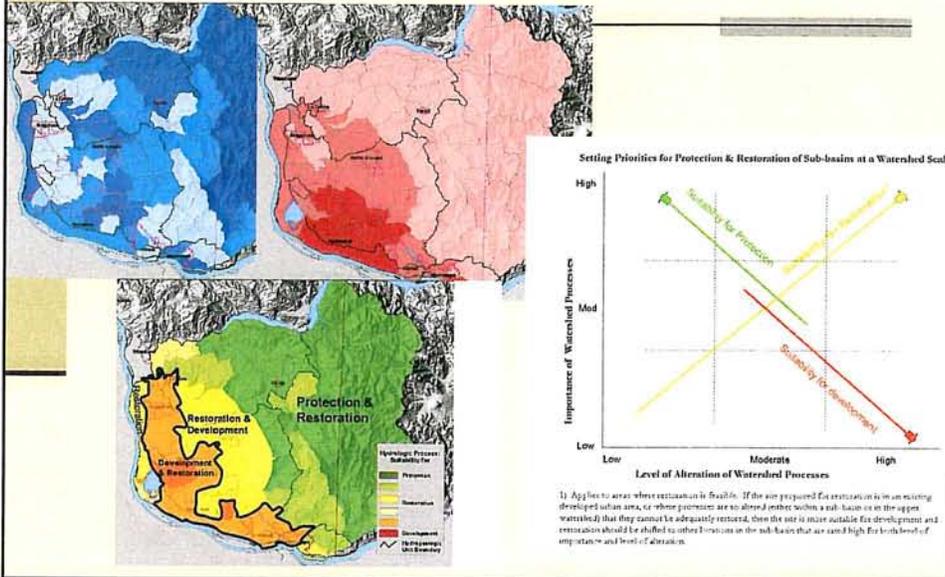
Ecology Publication #05-06-013

Setting Priorities for Protection & Restoration of Sub-basins at a Watershed Scale



1) Applies to areas where restoration is feasible. If the site proposed for restoration is in an existing developed urban area, or where processes are so altered (either within a sub-basin or in the upper watershed) that they cannot be adequately restored, then the site is most suitable for development and restoration should be studied to other locations in the sub-basin that are rated high for both level of importance and level of alteration.

Clark County Example



Using a Watershed Approach with Existing Plan

1. **Find existing watershed plan** for area of impact project
2. **Determine if impact project** is in priority restoration area
3. If not, **identify a priority area** nearby
4. **Identify the goals** of priority area – Example: restore water processes by increasing floodplain storage and infiltration
5. **Identify general mitigation actions** that could achieve goals – Example: open levies, plug drainage ditches, break drain tile
6. Use Chart C to **evaluate specific sites** (either on-site or off-site) in target area that allow for those mitigation actions

When No Watershed Plan Exists

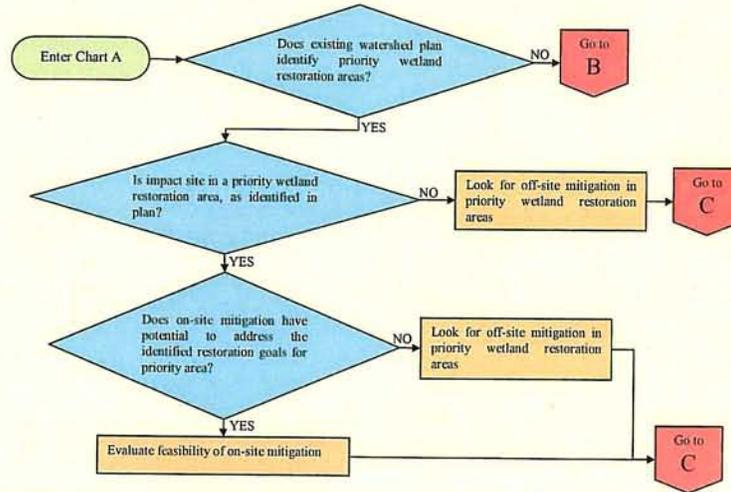
1. Use Chart B to **determine if impact project** lies in suitable watershed
2. If not, use Chart B to **identify nearby suitable watersheds** and the altered processes
3. **Identify goals and general mitigation actions** for restoring one or more altered process
4. Use Chart C to **evaluate specific sites** that could achieve those goals (address altered processes)

Evaluating Specific Sites

- Site helps to restore watershed process
- Mitigation would be sustainable
- Mitigation would result in appropriate WL type (HGM class) for landscape setting
- Mitigation would have appropriate water source for WL type
- Site will have adequate hydrology

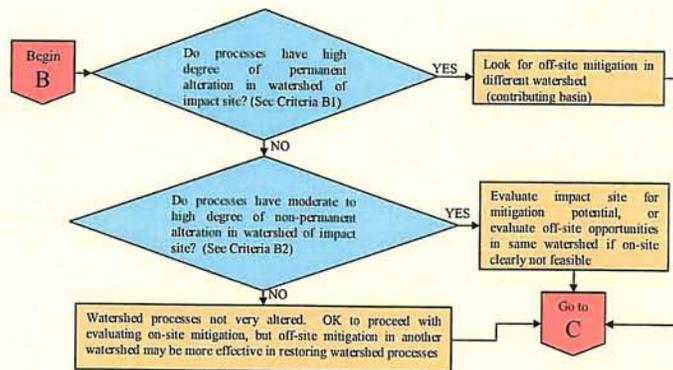
Guidance Charts:

Chart A. Choose On-site vs. Off-site Mitigation Using Existing Watershed Plan



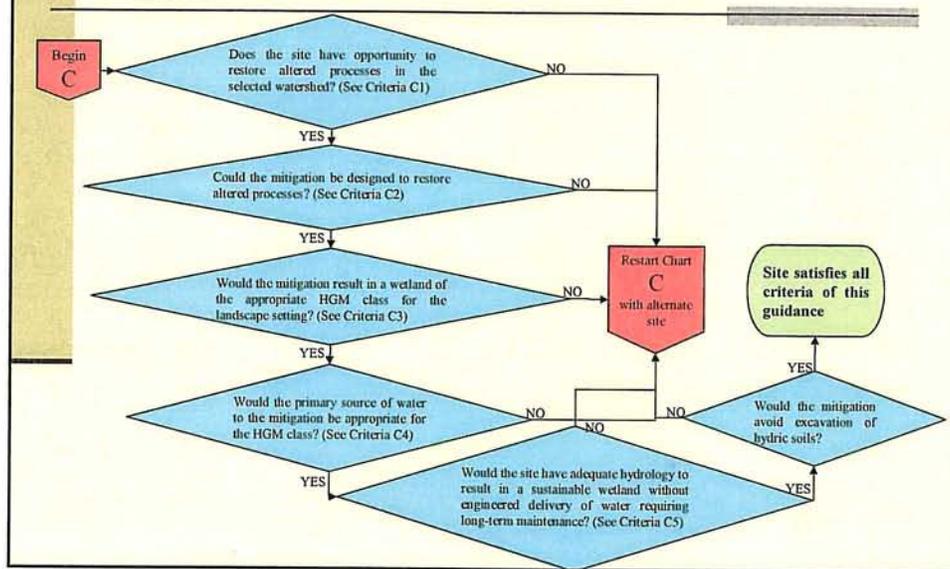
Guidance Charts:

Chart B. Choose On-site vs. Off-site Mitigation When Appropriate Watershed Plan is Lacking



Guidance Charts:

Chart C. Evaluate Specific Mitigation Sites in a Watershed Context



Potential Users of Guidance

- **Permit applicants** can use to select mitigation site and justify selection to regulatory agencies and the public
- **Federal, state, and local permit reviewers** can use to verify that selected site is appropriate
- **Local planners** can use to identify targeted restoration areas in absence of comprehensive watershed assessment

Current Status of Guidance

- Have received comments on 1st draft from technical staff at Ecology, Corps, and EPA during winter 2008
- Working group will release 2nd draft for internal agency review in May 2008



Guidance Pushes Shifts in Policy

Old	New
Avoid whenever possible	Restore watershed processes whenever possible
Mitigate on-site if possible	Mitigate where process restoration will be effective and sustainable
Replace with similar functions to impact wetland	Use watershed plan to prioritize processes and functions to be restored
Site selection driven primarily by applicants' needs at project level	Site selection driven primarily by watershed needs and planning at regional level
Mitigate within jurisdiction	Mitigate where watershed plan shows the need