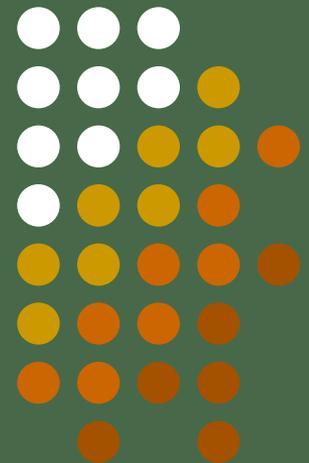


Sensible and effective approaches to
**Shoreline Inventory and
Characterization**

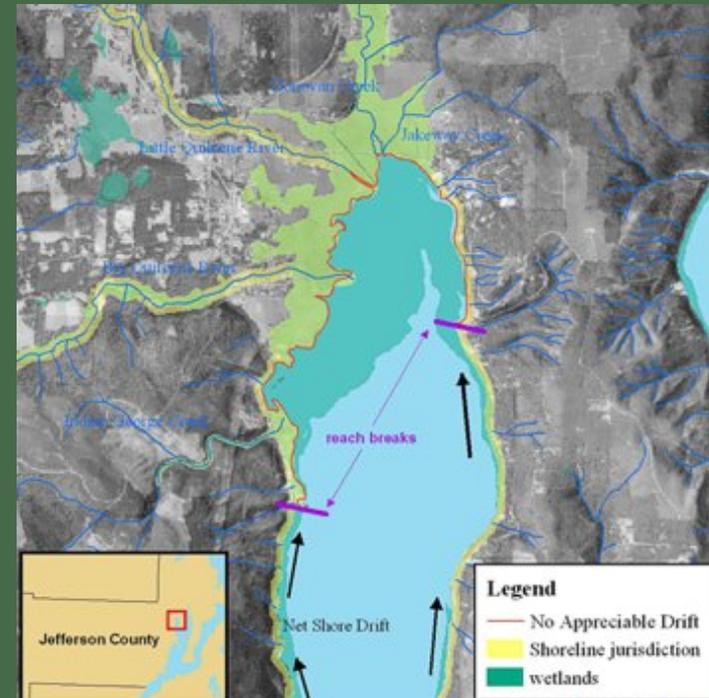
Jeffree Stewart
Washington Department of
Ecology



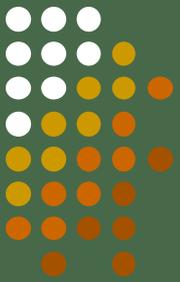
What is an Inventory & Characterization?



- In practical terms, it is a **FOUNDATION** for an SMP.
- WAC 173-26-201(3)(c) and 173-26-221 details content.
- Expands on defining extent of shoreline jurisdiction
- Documents how shorelines are being used, and what ecological resources are there to protect.



Consider how the Guidelines will apply where you are....



- **Be focused and strategic with how you do this work.**
- Guidelines descriptions are generic, applying statewide. Which apply, and how do they make sense in your geography?
- Determine emphasis areas based on your particular shoreline environment.



Strategic approach



- Inventory & characterization is among first tasks of SMP update
- I& C can be expensive, so be thoughtful....
- Focus the work -to contain costs, and to minimize superfluous information.



Essentially, this work involves:



- **INVENTORY**
 - Gather existing info
- **ANALYSIS**
 - Focus on what matters for shoreline management , evaluate and organize
- **CHARACTERIZATION**
 - Document current conditions



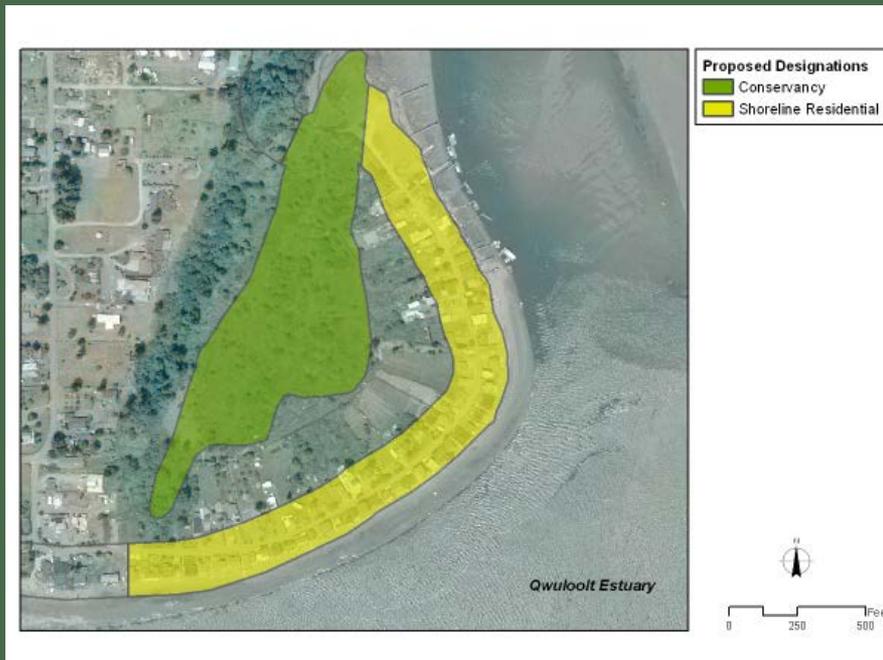
Maps, Photos, Text....



- Many kinds of information combine to describe current conditions
- Keep track of sources in detail
- Start with old, look for new and available info.
- Do refine information, but don't reinvent the wheel.



Integration of SMP documents



The inventory & Characterization will support :

- ENVIRONMENT DESIGNATION assignments
- Restoration Plan development
- Public Access planning
- Cumulative Impacts Analysis

Baseline for evaluating No Net Loss



An Inventory & Characterization documents shoreline ecological functions and also waterfront uses at the time of SMP adoption

8 Year review cycle for SMP updates per 2010 legislation;
Revise SMP as needed...

Inventory will be an important reference tool for that evaluation.



A clarification of terms:



- “Shoreline Analysis” may be another name for an “Inventory and Characterization.”
- It could also be part of an “Inventory & Characterization.”
- (The terms have been applied interchangeably)

Uses, Structures, Functions



- These terms have specific meanings for shoreline management
- Throughout the SMP they should be applied correctly to avoid confusion

Use Analysis



- Evaluate how your shorelines are being used-note changes since SMP was last updated.
- Provide basis for community conversations about how waterfront uses interact, and identify “use conflicts”
- Identify rational planning approaches for the future waterfront.

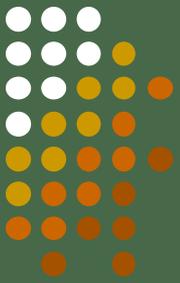
Focus and scope of Characterization



- Important to consider what is a useful **LEVEL** of **DETAIL** for planners
- Select information most germane to shoreline management.



What are key elements of an Inventory & Characterization?



- Extent of existing development
- Extent of ecologically intact and sensitive areas
- Available and needed public access
- Evaluation of water-dependent uses, presently existing, and projected needs.

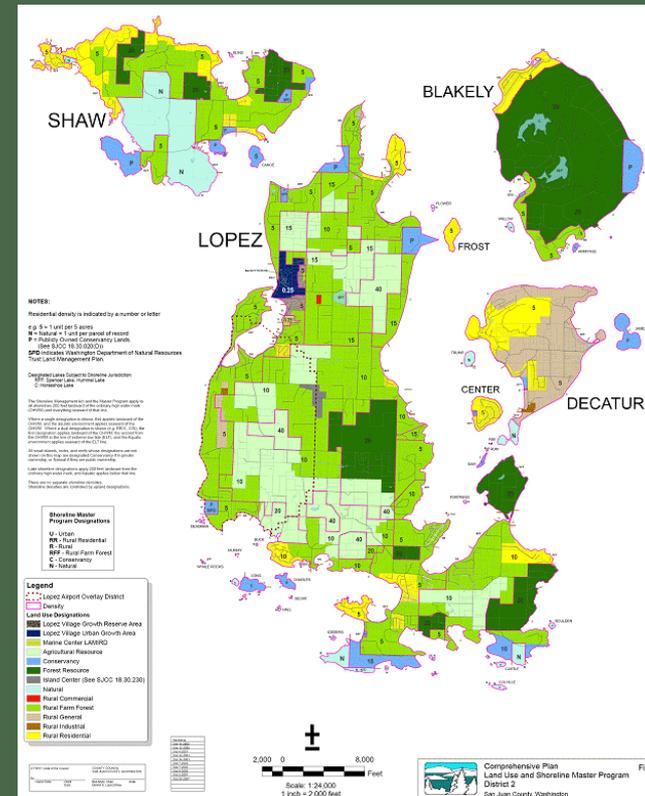


Documenting Current Conditions

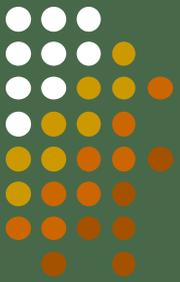


Inventories are based on EXISTING INFORMATION...new studies are not required.

- Build on existing inventory done when your SMP was written, and similar evaluations done with Comp Plan and CAO updates.



Evaluating and applying scientific data



- The Guidelines, at 173-26-201(2)(a)(iii), state:
- “Where information collected by or provided to local governments conflicts or is inconsistent, the local government shall base master program provisions on a reasoned, objective evaluation of the relative merits of the conflicting data. “

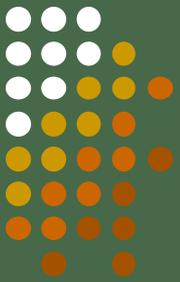
Documenting Current Conditions



- Critical considerations will vary from one water body to another-common examples:
- Do the Designations in your current SMP still generally make sense?
- Which lands are publicly owned, and where is public access available now?
- Shoreline modifications-how much shoreline is armored?
- What type of armoring, in what condition?
- Where are there overwater structures?
- How many lots are undeveloped?
- Where are degraded shorelines, and what level of effort would it take to restore some or all ecological functions there?



Documenting Current Conditions



- Which shoreline areas have been left ecologically intact?
- What are the ecological functions in need of protection?
- Which areas are most important to the economic vitality of your jurisdiction?
- How much shoreline will be needed for water-dependent uses as the population grows?
- How accessible are your publicly owned shorelines?

Public Access documentation



- Document public access to publicly owned shorelines.
- Viewpoints, beach access, street ends, parks, community access.
- Include currently available and potentials for increase.
- This will help planning for future public access needs and opportunities

Water Dependent Uses



Shoreline Use Analysis should include evaluation of Water-dependent uses

These include marinas, boat yards, commercial fishing and aquaculture facilities, sport fishing and other recreational amenities...

These uses cannot be conducted without direct access to the water.

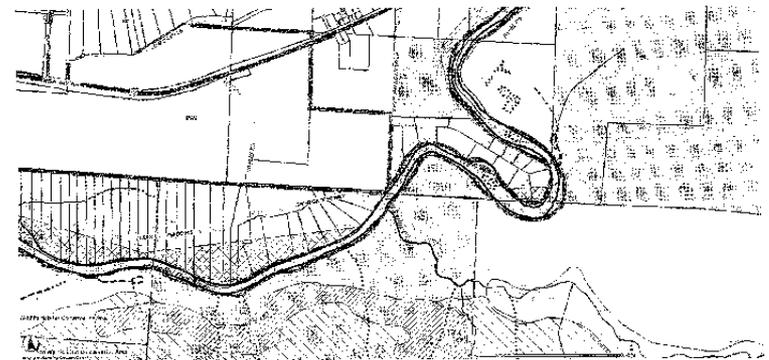
Shoreline master programs need to ensure space is reserved for future water-dependent use needs

Residential Development



- Long range planning for residential development is a key facet of shoreline management
- Residential is a preferred use of shorelines, and permits are not required if SMP provisions are adhered to....
- Inventory needs to support rational decisions being made.
- Where can homes be safely built with minimal impacts?

Stormin Norman Rd Development: Vulnerability?



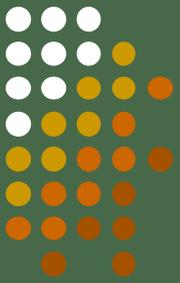
Residential Development



- Inventory needs to include information about how many lots are already developed, how close homes are to the waterfront
- What existing/planned infrastructure and zoning indicate about likely future residential development.
- How to protect present shoreline vegetation/ecological functions?



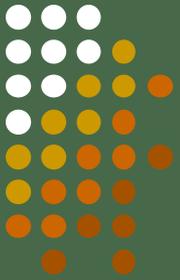
Extent of appurtenant structures



- Inventory should generally document extent of appurtenant uses, especially docks, stairs, and other structures located waterward of homes.



Nonconforming Structures



- Document existing structures which are located over the water or very close to the edge
- Include the locations of such structures and uses, and notes about their condition at the time the SMP is adopted.
- Degree or extent of their impacts on ecological functions, such as from shading or to water quality, should be noted.



Vegetation management



- *Which lands in shoreline jurisdiction are forested? Where are other kinds of vegetation present (dunes, wetlands....?)*
- *Intact vegetation is a significant ecological function, generally to be protected*
- *Extent of intact vegetation is one factor in determining appropriate shoreline Designation.*
- *A no-net loss indicator.*



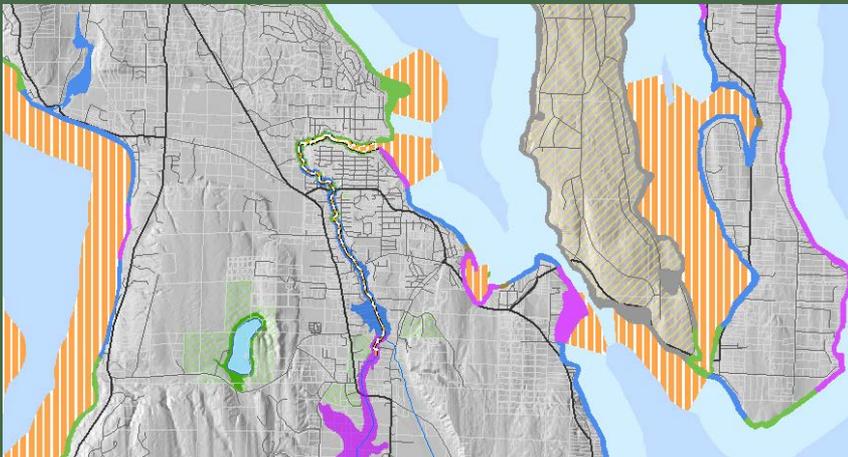
Restoration Planning



- **One of the tasks in Restoration Planning is to prioritize which areas have the best potential for success**
- Identify shoreline reaches where restoration projects are most likely to be successful.
- Help focus how to spend limited funds for restoration.



Shoreline Designations

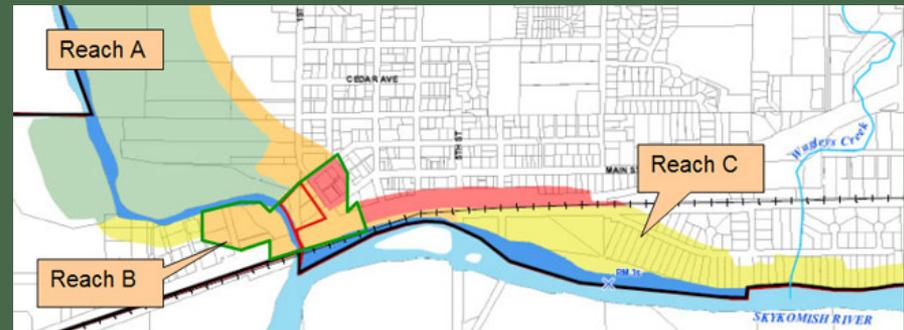


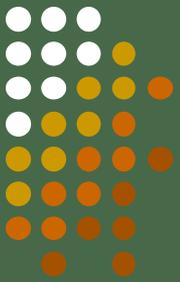
- Criteria for assigning Environment Designations is at WAC 173-26-211.
- **Inventory & Characterization** contains the basic documentation for applying those criteria.
- Custom approaches may be devised, if they make sense and are properly explained.



Assigning Designations

- Reach-specific information applied:
- Show why a certain reach of shoreline fits one or another set of criteria for **Environment Designations**.
- Maps need to show appropriate level of detail.



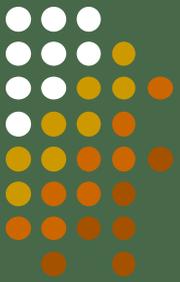


Environment Designations

- Include enough detail about reach to reach conditions as they change so that boundaries between Environment Designations that make sense can be clearly shown.



Aquatic designation



- Remember that designation assignments also apply to underwater lands, so available information on these has to also be included.
- ESA listed species/ rearing areas
- Freshwater sites/criteria
- Intact drift cell processes
- Forage fish spawning
- Important shellfish areas



Useful examples available

- Ecology website has lots of resources.
- Many examples of Inventory & Characterization are online
- You can use these to learn both what to do, and what to avoid.





Reasonable and Adequate

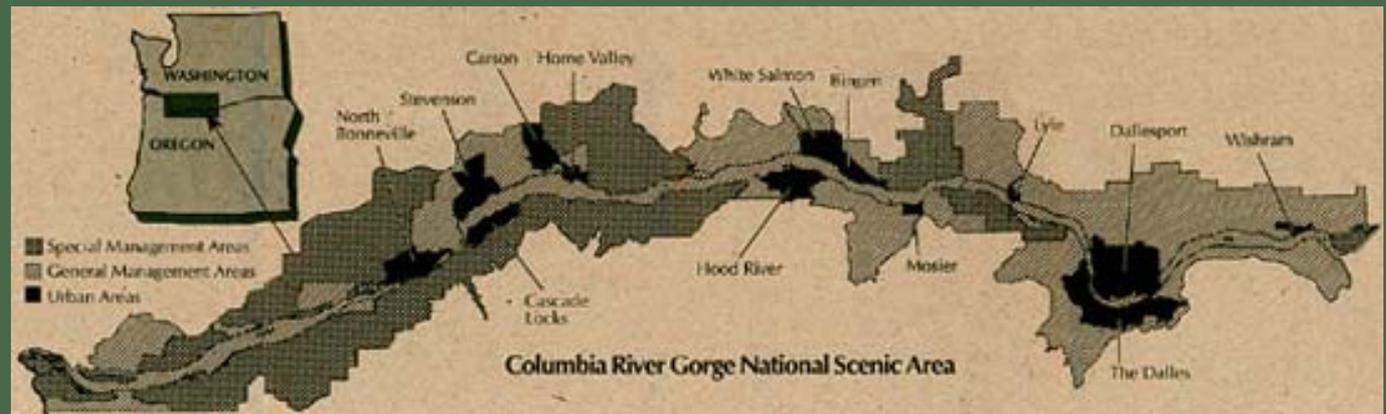
- Ecology review of Inventory & Characterization will seek to ensure the necessary and appropriate information has been included.
- “Reasonable and adequate” sources of information need to be considered and reflected.
- Try to avoid having “too much” unnecessary information, or “not enough” of what is needed.



Essential review

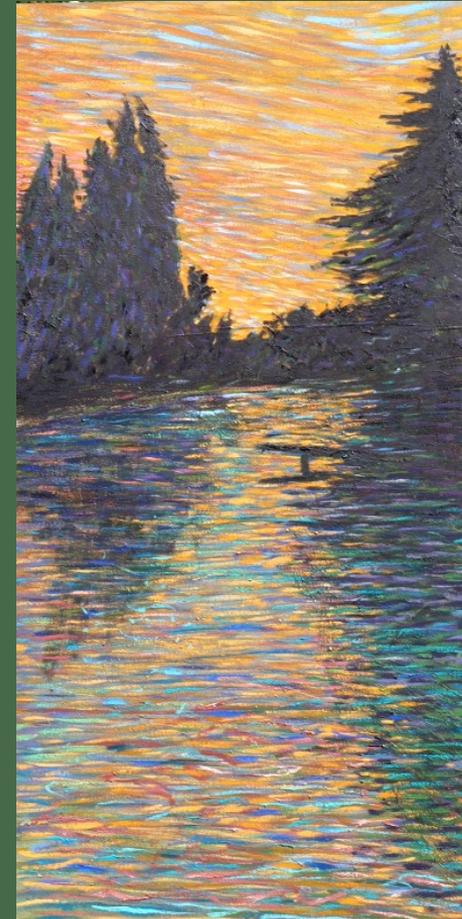


- *Don't reinvent the wheel-review and select from appropriate and existing resources.*
- *Work with other agencies, tribes, non-profit organizations who have gathered more recent information.*
- *Use comparative images, past and present, to show change.*
- *Where practical, collaborate to share the costs of evaluating jurisdictions which overlap.*



Essential Review

- Land uses well described
- Basis for cumulative impacts review included
- Ecological functions characterized
- Rationales for Environment Designation recommendations
- Restoration evaluations
- Public Access needs and opportunities described



Questions?

