Watershed Planning in Washington State: A Decade of Experience

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Overview

- Context for Watershed Planning
- Watershed Planning Process
- Research Findings
  - Planning Processes
  - Planning Outputs
- What next?
Planning and Decision Making: Administrative Procedures

- “Traditional” Administrative Procedures
- Notice-and-comment
- Many challenges
- Implementation often delayed
Collaborative Environmental Management

- Key stakeholders involved
- Often Voluntary
- Seek mutual solution
- Implementation?
Watershed Planning Act (1998)

- Local citizens, local, state, and tribal governments
- Planning units initiated by local lead agencies, with Ecology support
  - Plans **must** address: water quantity
  - Plans **may** address: instream flows, water quality, storage, fish habitat
  - Required participants: all counties, largest city/town, largest water purveyor.
    Others: tribes, public, state agencies
Context for Planning

- Water Resource Inventory Areas (WRIAs)
- Watershed Scale
  - Watershed Planning Act
  - Salmon Recovery Planning Act
# Watershed Planning Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Task</th>
<th>Funding</th>
<th>Timetable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>Planning Unit Organization</td>
<td>$50,000/WRIA $75,000/Multi-WRIA</td>
<td>~ 1 year</td>
</tr>
<tr>
<td>Phase II</td>
<td>Data Collection and Assessment</td>
<td>$200,000/WRIA, extra $100,000 for each optional element*</td>
<td>~ 2 years</td>
</tr>
<tr>
<td>Phase III</td>
<td>Watershed Plan Development</td>
<td>$250,000/WRIA</td>
<td>~ 2 years °</td>
</tr>
<tr>
<td>Phase IV</td>
<td>Implementation</td>
<td>varies</td>
<td>~ 5 years</td>
</tr>
</tbody>
</table>
Findings: Planning Processes

- **Benefits**
  - Establish relationships/trust
  - Gain capacity to address water issues

- **Challenges**
  - Participation
  - Trust is complex
    - Personal and institutional
  - Inadequate Tools
    - Timelines
    - Funding
    - Technical Assistance
Findings: Institutional Development

- Mandated participants present
- Underrepresented?
  - “Public”
  - Tribes
- Planning Processes
  - Timelines difficult
  - Developing “trust”
Watershed Planning Activity

- Active Planning or Implementation (40 WRIAs)
- Not Planning (15 WRIAs)
- Stopped Planning (7 WRIAs)
Outputs from Collaboration

- **Output** – work completed by an entity or program
- **Outcome** – events or changes in conditions resulting from outputs

**Activity** → **Output** → **Intermediate Outcome** → **End Outcome**

- Collaborative Planning
- Plan developed
- Plan implemented, projects completed
- Environmental conditions improve
Evaluating *outputs*:

- Illustrates whether policy objectives are being achieved
- Indicates *capacity* for achieving outcomes
- Provides a base of information for future attempts to link outputs to outcomes
Scope of Current Research

- Watershed Planning Act
  - Are plans developed and adopted?
  - Do plans contain required/optional elements?
  - Do plans contain recommendations/priorities?
  - Do plans address instream flow issues?
Puget Sound Watersheds

Legend
- Puget Sound WRIAs (1-18)
- Other State WRIAs (19-62)
Criteria and Plan Evaluation

- **Status of plans** – Were plans produced and adopted? (in some areas, yes)

- **Plan contents** – Which elements are present? Do plans contain specific goals, recommendations, and priorities? (highly variable, but more than minimum)

- **Stream flow** – Do plans address low stream flows for salmon recovery? (not very well)
### Sample Data Analysis Matrix

<table>
<thead>
<tr>
<th></th>
<th>WRIA 1</th>
<th>WRIA 2</th>
<th>WRIA 3</th>
<th>WRIA 6</th>
<th>WRIA 11</th>
<th>WRIA 12</th>
<th>WRIA 13</th>
<th>WRIA 14</th>
<th>WRIA 15</th>
<th>WRIA 16</th>
<th>WRIA 17</th>
<th>WRIA 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is importance of sufficient flows for salmon noted?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Are low flow problems identified?</td>
<td>Yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Does the plan outline goals for restoring flows?</td>
<td>Yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Does the plan offer specific flow-related actions?</td>
<td>Yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Are instream flow rules a priority?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Are quantitative target flows offered?</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Are flow improvements prioritized by needs of ESA-listed species?</td>
<td>no</td>
<td>n/a</td>
<td>no</td>
<td>n/a</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>n/a</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>
Watershed Plan Outputs

- 12 plans produced
  - 7 plans adopted
  - 5 drafted and not adopted
  - 6 areas not planning under 2514

- 11 plans include at least one optional planning element

- 9 plans address all optional elements

- 7 plans include both recommendations & priorities (four adopted)
Watershed Planning Status
 Adopted Watershed Plans

- 7 adopted plans – 5 of these address all planning elements
  - Some groups going beyond minimum requirements

- 5 plans indicate pre-existing watershed planning efforts
  - Only 2 plans adopted in WRIAs where policy spurred planning
Planning for Stream Flows

- Plans consistently mention:
  - Flow importance
  - Flow problems
  - Goals
    - 10 plans identify goals

- Plans do not consistently mention:
  - Link to ESA-listed species
  - Recommendations
    - 7 plans include
  - Instream flow priorities
Summary of Findings

- Watershed plans achieved some policy objectives
  - Policy spurred planning in some areas
  - Plans developed and adopted in some areas
  - Many units doing more than minimum
- Failures are evident as well
  - Non-adopted plans not likely to achieve outcomes
  - High variability in plan content
  - Implementation uncertainties
- Potential for addressing stream flows is limited
Next Steps

- Examine planning outputs statewide
- Examine inner workings of planning units
  - Leadership, Participation, and Representation
- Implementation Activities
- Modify Watershed Planning Act?
  - Plan structure and contents
  - Plan review
Thank you and Questions??

Thank You!!

- Jason Wilkinson
- Dr. Karma Norman, NOAA/NMFS

More on Watershed Planning:

