Stream Management Plans 101

Friday, August 27th, 2021
9:00 – 10:15am MDT
• Please change your Zoom name to your first and last name
Today’s Agenda

- Welcome & Introductions
- Meet the SMP Team
- History of SMPs
- The San Miguel SMP
- Nuts & Bolts
- The South Boulder Creek & Middle Colorado SMPs
- Resources
- Q&A
Please Introduce Yourself

Share with us in the chat:

1. Name

2. Organization

3. River Basin

4. Land Acknowledgment
   It is River Network’s practice to begin our meetings by recognizing and acknowledging the Native peoples whose traditional territory includes the land and water on which we are meeting and who were the first protectors of the lands and waters around us. We do so out of recognition and respect to them.

   To learn more about the lands you are currently living in, we invite you to visit [https://native-land.ca](https://native-land.ca)
The SMP Team

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Alba Watershed Consulting

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Watershed Program Director  
CWCB
What is a stream management plan?

Stream Management Plans use assessments to analyze holistic river health (flows, fishery, ability to transport sediment, bank stability, riparian corridors, etc.) and recreation goals. Those assessments are then combined with stakeholder input to identify strategies and actions to protect/enhance priority objectives.

CWCB Guidance: A stream management plan should:

1. Involve stakeholders to identify environmental & recreational values/objectives that are locally important;

2. Assess existing biological, hydrological, and geomorphological conditions at a reach scale;

3. Identify flows, other physical conditions or projects needed to support environmental and recreational values;

4. Prioritize alternative management actions or projects to achieve measureable progress toward maintaining or improving flow regimes and other physical conditions.

Key Features:
- Community Driven Goals and Methods
- Voluntary
- Flexible Scale
- Leadership Varies
SMP Activities 2016-2021

- Arkansas (upper)*
- Boulder Creek*
- Big Thompson River
- Blue River
- Cache la Poudre River (Upper, Fort Collins)
- Clear Creek*
- Colorado River (Glenwood to DeBeque)
- Colorado River (Grand County)
- Crystal River
- Eagle River
- Gunnison River (upper)
- Mancos River
- North Fork Colorado River (Kawuneeche Valley)*
- North Fork of the Gunnison River
- Purgatoire River
- Rio Grande, Conejos River, and Saguache Creek
- Roaring Fork River (Aspen)
- Saint Vrain and Left Hand Creeks
- San Juan River (upper)
- San Miguel River
- South Boulder Creek
- South Fork Republican River
- White River*
- South Platte River (Chatfield)
- Yampa River (Steamboat Springs)
- Yampa & Elk rivers

*Not depicted on map

269 Project Recommendations

- From 11 completed SMPs
- 24 distinct project types
- Most are multi-benefit
- 25% partially or fully funded

$8M in grants:

- 55% CWCB Grants
- 45% Local Cash/In-Kind

Source: coloradosmp.org
Nuts & Bolts

- Who is leading what elements?
- What is the geographic focus?
- What are the goals and tasks?
- Who is involved and how?
- What is analyzed?
- What problems are to be solved?
- What actions are on/off the table?
Nuts & Bolts: Geographic Scale

- How do I improve fish habitat at this site?
- How can I improve this diversion structure to better deliver water and allow fish passage?
- Where is there important aquatic habitat to protect?
- Which diversion structures pose fish passage barriers?
- Assess the fish species distribution in the basin
- Describe the hydrology/water use patterns in the basin
**Nuts & Bolts**

- Who is in charge?
- What is the geographic focus?
- What are the goals and tasks?
- Who is involved and how?
- What is analyzed?
- What problems are to be solved?
- What actions are on/off the table?
reach-scale assessment for seven indicators of stream health:
• diversion infrastructure
• recreational flow needs
• aquatic habitat flow needs
• geomorphology
• riparian vegetation
• aquatic life
• water quality
Nuts & Bolts: Steamboat Assessment

Assessment of 11 variables
- flow regime
- sediment regime
- water quality
- landscape
- floodplain connectivity
- riparian condition
- organic material
- morphology
- stability
- physical structure
- trophic structure
Nuts & Bolts

- Who is in charge?
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<table>
<thead>
<tr>
<th>SUPPORT FEASIBILITY EVALUATION AND CONSTRUCTION OF KENDIG RESERVOIR</th>
<th>PROJECT CONS3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DESCRIPTION</strong></td>
<td>Construction of Kendig Reservoir to provide additional storage on the south side of the Colorado River where existing and future shortages occur.</td>
</tr>
<tr>
<td><strong>OBJECTIVES ADDRESSED</strong></td>
<td>CONS(b), CONS(c), CONS(d), CONS(e)</td>
</tr>
<tr>
<td><strong>LOCATION OR AFFECTED AREA</strong></td>
<td>West Divide Creek drainage</td>
</tr>
<tr>
<td><strong>WATERSHED REGION</strong></td>
<td>Upper</td>
</tr>
<tr>
<td><strong>ORGANIZING ENTITY</strong></td>
<td>West Divide Water Conservancy District</td>
</tr>
<tr>
<td><strong>PRINCIPLE PARTNER(S)</strong></td>
<td>CRWCD, TU, CPW, USFS</td>
</tr>
<tr>
<td><strong>OPPORTUNITIES CONSTRAINTS CHALLENGES</strong></td>
<td>Feasibility studies for the construction of Kendig Reservoir on West Divide Creek have been conducted in the past and are ongoing. These studies provide insight into the firm water supply and fatal flaw analysis associated with construction of a 16k+ acre-foot reservoir. This reservoir has the potential to partially fill the water supply gap experienced by water users in the Divide Creek drainage.</td>
</tr>
<tr>
<td><strong>DEGREE RIPENESS</strong></td>
<td>Medium</td>
</tr>
<tr>
<td><strong>TIMEFRAME</strong></td>
<td>Immediate/Ongoing</td>
</tr>
</tbody>
</table>
| **IMPLEMENTATION STEPS** | • Continue to support feasibility studies unless a fatal flaw that prohibits construction is identified.  
• Create models to identify optimal reservoir operations to fill water supply gaps.  
• Work with water right owners who may wish to store available flow during runoff for use later in the irrigation season (i.e. create storage accounts).  
• Aid in identification of grant/loan opportunities for construction. |
| **ESTIMATED COSTS** | **CAPITAL** | **OPERATION/MAINTENANCE** |
| | $106 M | $10K/yr |
| **EVALUATION CRITERIA** | Positive feasibility studies to move construction of Kendig Reservoir forward. |
| **CWC METADATA** | **PROJECT TYPE** | **WATER DESTINATION** |
| | Ap, Env/Rec, Industrial | Colorado River |
| **BASIN** | Colorado |
| **MULTIPLE NEEDS** | Yes |
| **ESTIMATED WATER YIELD/UNITS** | West Divide, Garfield, Baldy, East Divide Creeks |
| **WATER SOURCE** | 0 – 16,500 ac-ft |
| **WATER DISTRICT** | 45 |
| **ESTIMATED CAPACITY/UNITS** | 16,500 ac-ft |

- What is the recommendation?
- Who will implement it?
- How?
- When?
- How will it be paid for?
- How will we hold each other accountable?
Resources

www.coloradosmp.org

Stream Management Plan Resource Library
Resources

• **Funding**
  - **CWCB Watershed Restoration Grants:** Typically due the first Thursday of November
  - Learn more at: [www.coloradosmp.org/smp-101/how-are-smps-funded](http://www.coloradosmp.org/smp-101/how-are-smps-funded)

• **Peer Learning Network**
  - Learn more at: [www.coloradosmp.org/community-and-learning](http://www.coloradosmp.org/community-and-learning)

• **Need support? Reach out to River Network and others including:**
  - Trout Unlimited
  - The Nature Conservancy
  - Audubon Society
  - Local conservation districts
Thank you!

Contact Us:

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