LEARNING BY DOING

A New Approach to Managing Aquatic Resources in Colorado

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OVERVIEW

- History
- Who we are
- Monitoring Plan
- Challenges
- Successes
HISTORY

- Arid West Climate
- Water Supply & Demand Imbalance
- Conflict, Litigation, Impasse
- 2002 Drought....
Mitigation & Enhancement Requirements

- Windy Gap Firming Project (Northern Municipal Subdistrict)
- Gross Reservoir Expansion Project (Denver Water)
- More than $10 million earmarked for mitigation and enhancement projects

Inter-Governmental Agreements

- Cooperative partnership of East and West Slope Stakeholders
- Establishes organizational structure and decision making
- Sets goals and priorities
LBD PARTNERS

- Colorado Parks and Wildlife
- Colorado River District
- Denver Water
- Grand County
- Middle Park Water Conservancy District
- Northern Water/Northern Water Municipal Subdistrict
- Trout Unlimited
- Grand County Water and Sanitation District
- U.S. Bureau of Reclamation
- U.S. Forest Service
- Town of Hot Sulphur Springs
- Winter Park Water and Sanitation District
GOAL OF LBD

To maintain and, where possible, restore or enhance aquatic environments in Grand County.
AQUATIC RESOURCE MONITORING PLAN

• Required in the IGA
• Incorporates Grand Co. Stream Management Plan elements
• Identifies existing monitoring efforts
• Evaluates monitoring gaps
• Evaluates effectiveness of restoration and operations
• Provides annual monitoring plan and reports
• Formation of Monitoring Subcommittee
CHALLENGES

Tremendous amount of existing monitoring activities

- 203 sites
- 12 monitoring entities
- Water quality, temperature, habitat, aquatic life and flow
CHALLENGES

- Establishing objectives
- Establishing annual planning process
CHALLENGES

- Disagreement on some methodologies for LBD specific programs
- Disconnect between Management and Monitoring Committees
- How to bring information together in comprehensive report?
SUCCESS STORIES - 2018 AQUATIC RESOURCE MONITORING PLAN

• Monitoring Summary
• Temperature Monitoring
• Substrate Monitoring
• Macroinvertebrate Monitoring
• Fish Monitoring
• Fraser Flats River Restoration Monitoring
• 303(d) List Monitoring
SUCCESS STORIES – FRASER FLATS RIVER HABITAT PROJECT

• **Goal:** Restore aquatic habitat on 1 mile of the Fraser River
  - Instream channel improvements
  - Revegetation of riparian area
  - Sept 2017 – project constructed
  - May 2018 - 0.4 mile opened to public fishing

• Baseline monitoring conducted

• Post-restoration monitoring includes:
  - Macroinvertebrates
  - Fish population estimates
  - Substrate condition
  - Stream Temperature
  - Willow revegetation

New point bars use rocks to redirect water into the middle of the river when water levels are low.
SUCCESS STORIES – 2018 STREAM TEMPERATURE

- Weekly operation calls
- Incorporate temperature data
- Operational adjustments considered to help alleviate high temperatures
“We are a group of very stubborn people intent on having it all – a healthy river and a water supply.”

–Mely Whiting, Trout Unlimited

“LBD is a wonderful example of how divergent interests can focus their collective energy and ample talents for the benefit of the environment.”

–Dave Little, Denver Water

Visit LBD’s Website:
https://www.grandcountylearningbydoing.org/
QUESTIONS?

PLEASE CONTACT ME:

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