

# North Platte Basin Implementation Plan

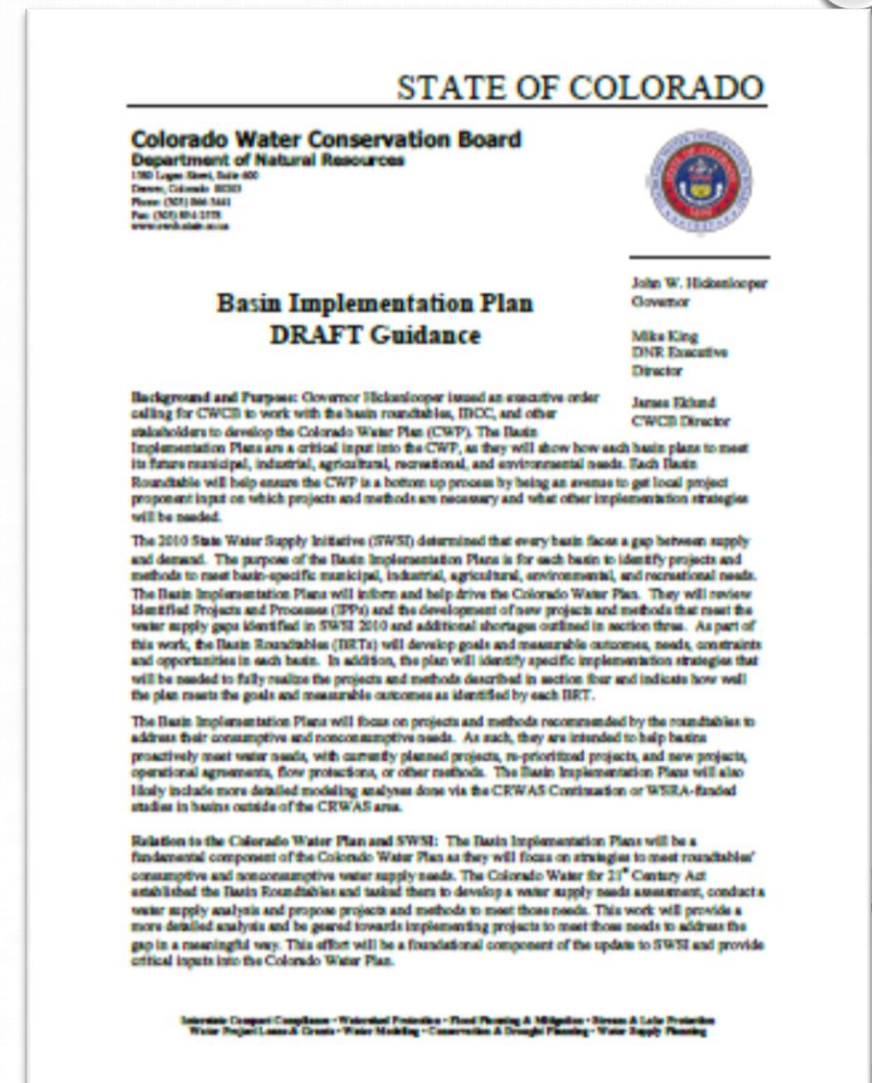
## **Draft Basin Goals and Measurable Outcomes**

November 12, 2013



# Section 1: Basin Goals and Measurable Outcomes

- Opportunity to envision what basin and project proponents “can and should accomplish”
- Highlight challenges (from SWSI 2010 & other reports)
- **Define goals (broad) and measureable outcomes (specific)**
- Describe how goals/outcomes address gap & inform the **Colorado Water Plan**



## Examples from Guidance:

- **NC Goal:** Ensure Cutthroat Trout have sufficient protection to keep them from being listed as threatened / endangered
  - *NC Measurable Objective:* Protect 90% of Cutthroat Trout habitat with min ISF's.
- **M&I Goal:** Develop projects and methods within the basin that meet as much of the future M&I gap as possible.
  - *Measurable Objective:* Develop projects that meet 150,000 AF of new demand.
- **Agricultural Goal:** Minimize the permanent loss of agricultural acreage to those acres being urbanized and those already planned for in the IPPs.
  - *Measurable Objective:* Develop agriculture/M&I sharing projects for any agricultural transfers above the 20% agricultural dry-up threshold.

# **Draft North Platte Basin Goals**

1. Maintain and maximize the consumptive use of water in the depletion allowance of the Equitable Apportionment Decree and the Three State Agreement Depletion Plan.
2. Increase economic development and diversification through strategic water use and development.
3. Restore, maintain, and modernize critical water infrastructure to preserve current uses and increase efficiencies.
4. Meet prioritized nonconsumptive needs through the strategic implementation of multipurpose projects.

## **Draft North Platte Basin Goals (*continued*)**

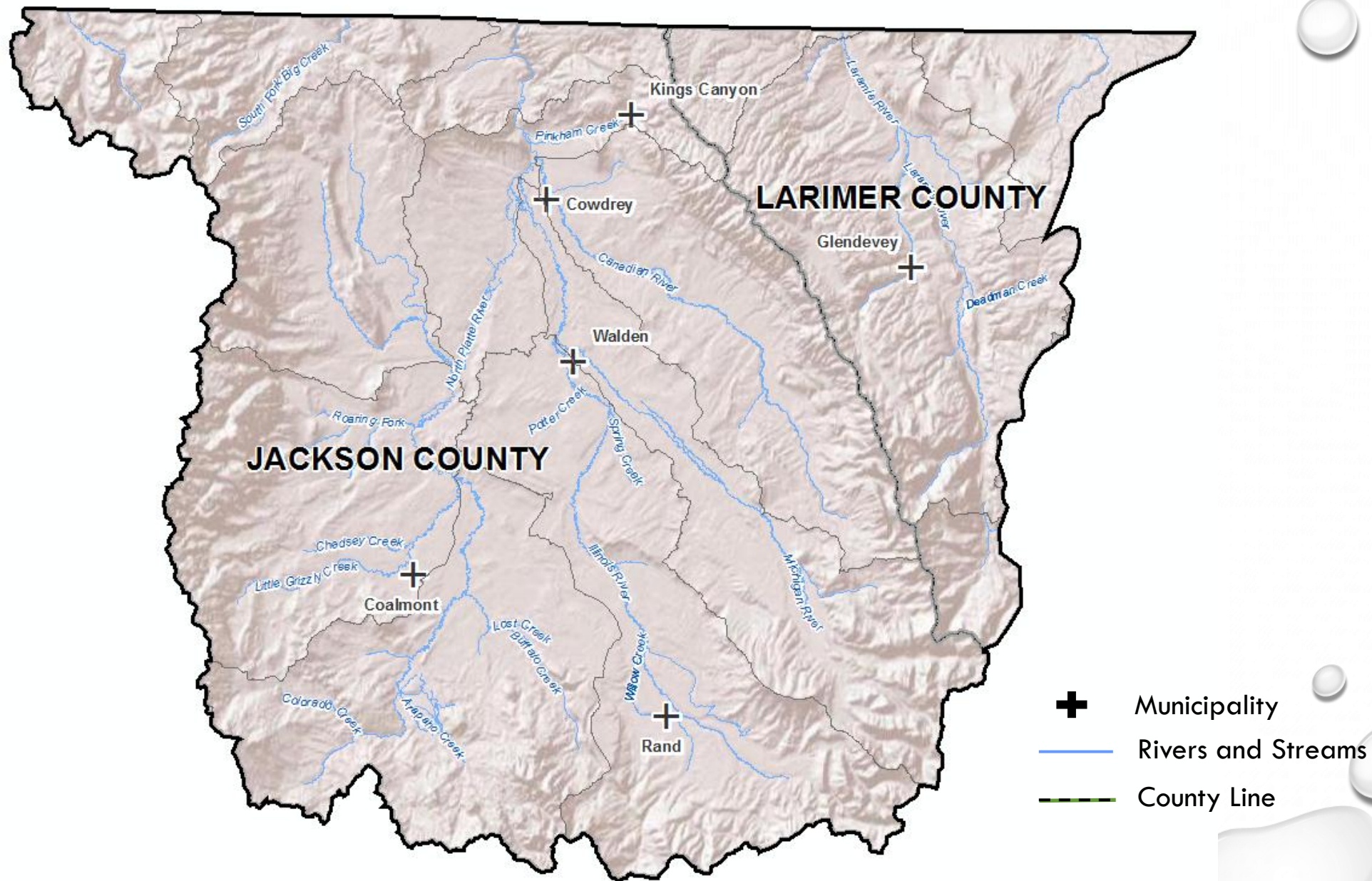
5. Describe and quantify the nonconsumptive benefits of agricultural use.
6. Promote water rights protection and management through improved streamflow gaging data.
7. Enhance forest health and management efforts for wildfire protection and beetle kill impacts.

The slide features a white background with several realistic water droplets of varying sizes in the corners. The top-left corner has a large droplet and several smaller ones. The top-right corner has a medium-sized droplet and a small one. The bottom-right corner has a large, irregular droplet and several smaller ones. The bottom-center has a small droplet and a medium one.

# Initial Concepts for Presentation of NPBIP Data

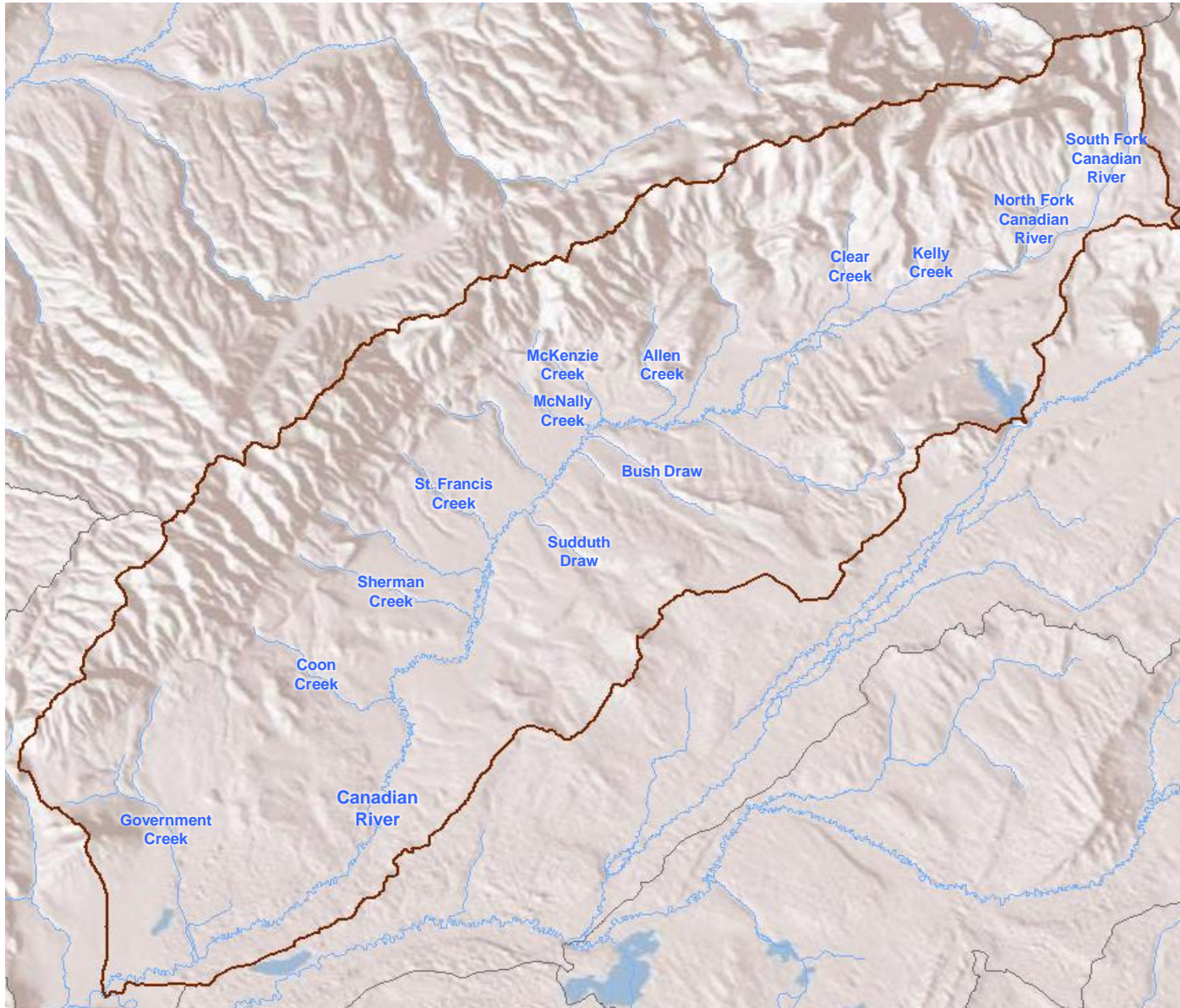


# NORTH PLATTE BASIN





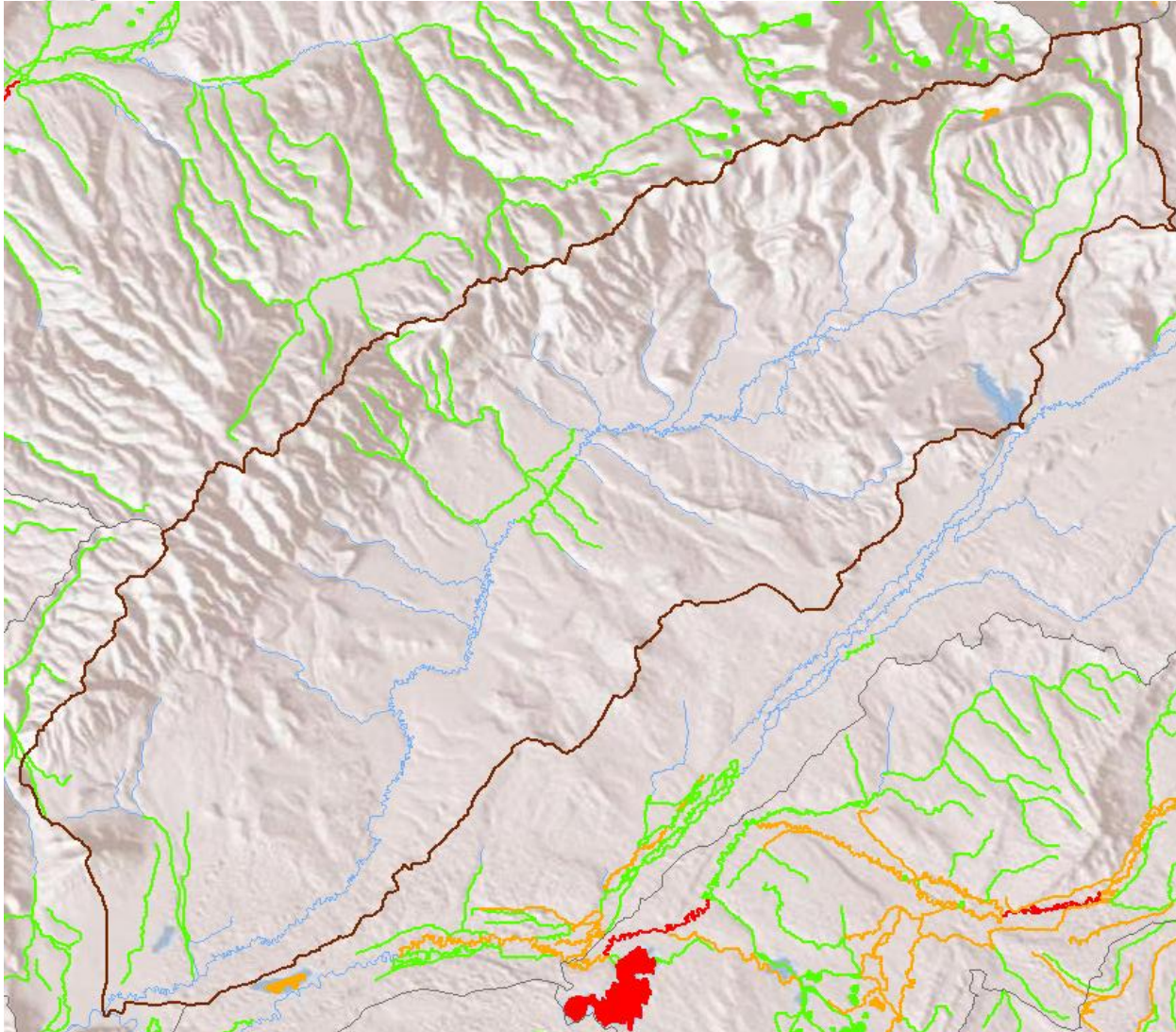
# IN-DEPTH LOOK AT THE CANADIAN SUB-BASIN



— Rivers and Streams  
— Sub-basin Boundary



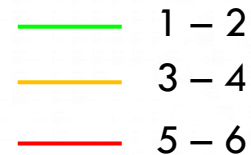
# NONCONSUMPTIVE USE ATTRIBUTES FOR CANADIAN SUB-BASIN



## Environmental and Recreational Subcategories:

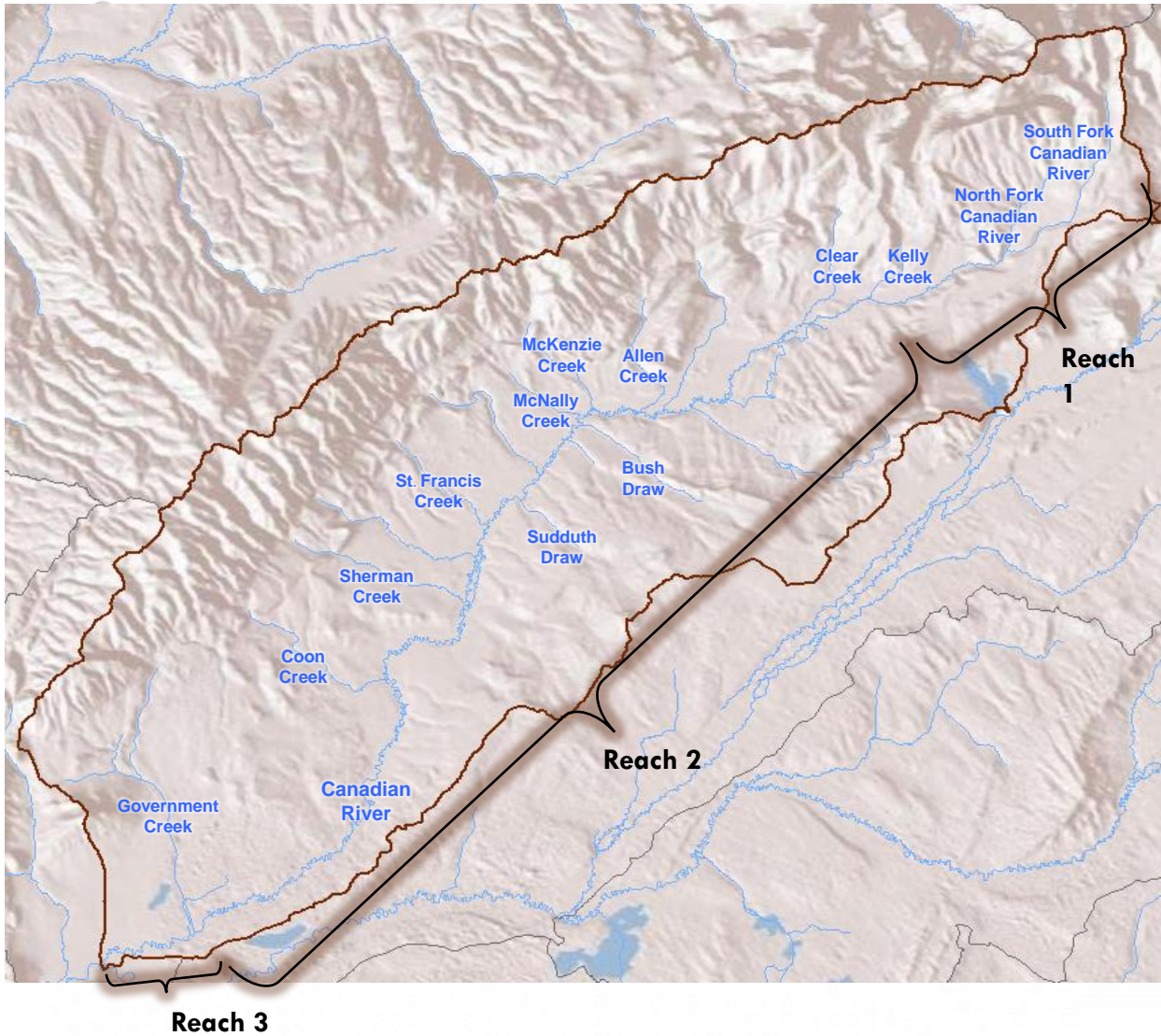
- Bald Eagle and Osprey
- River Otter
- Amphibians
- Rare Plants and Significant Riparian/Wetland Communities
- WQCD Outstanding Waters, Eligible/Suitable Wild and Scenic River Reaches
- CWCB Instream Flow Waters
- Lake Chub
- Important Waterfowl and Crane Habitat
- Important Fishing
- Whitewater and Floatwater Boating
- Waterfowl Hunting and Riparian/Wetland Wildlife Viewing

## Frequency of Environmental and Recreational Subcategory Occurrences by Stream Segment



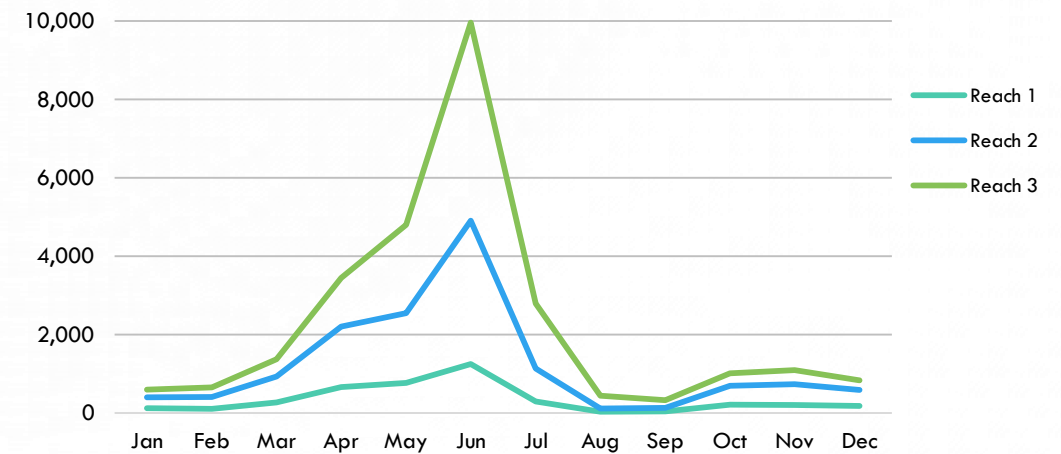


# LEGALLY AVAILABLE FLOW FOR THE CANADIAN SUB-BASIN



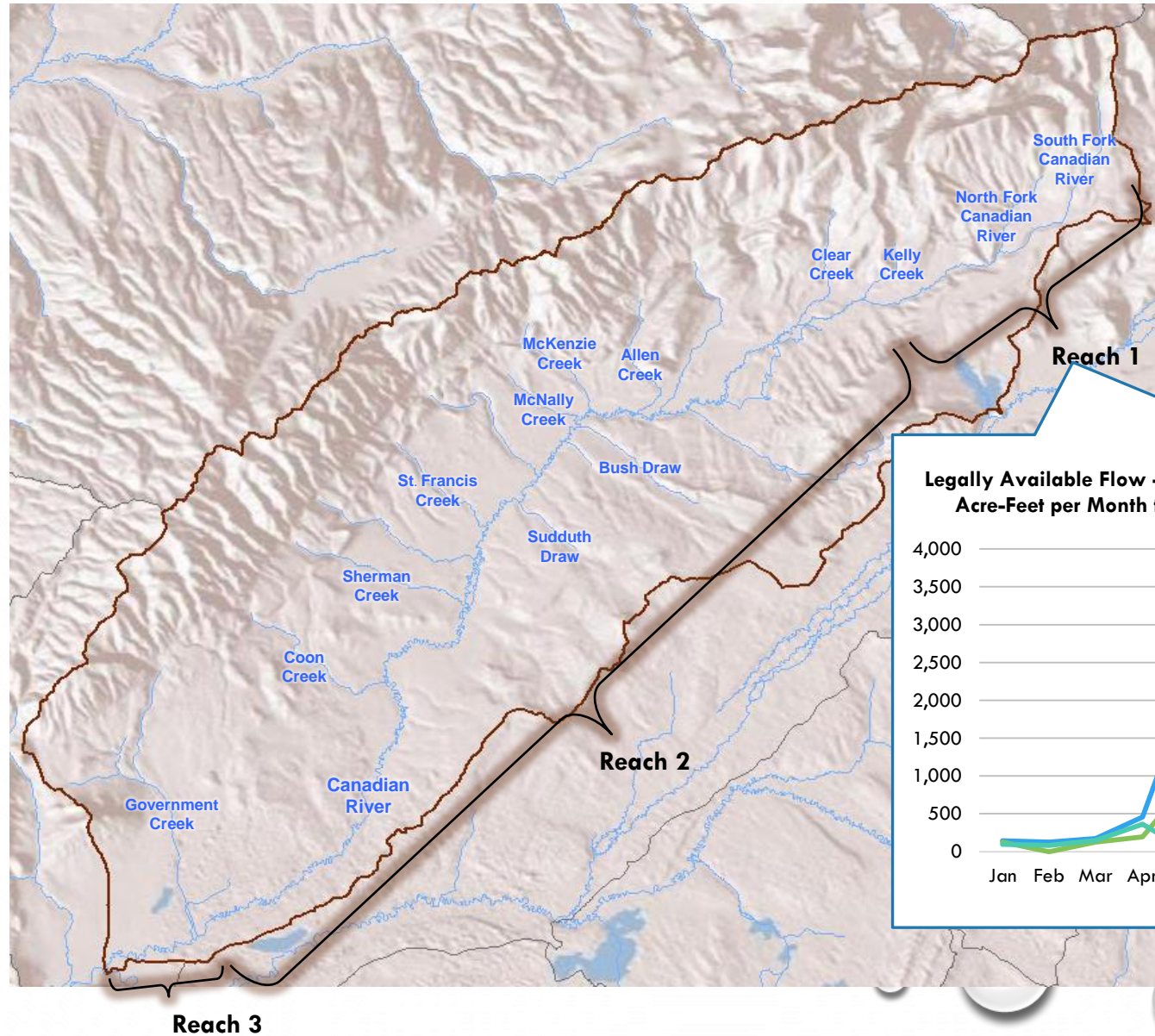
**Canadian mainstem subdivided into 3 different reaches based on average legally available flow for study period (1975-2007)**

**Legally Available Flow - StateMod Model Output**  
Average Legally Available Flow (acre-feet/month) for Study Period (1975-2007)

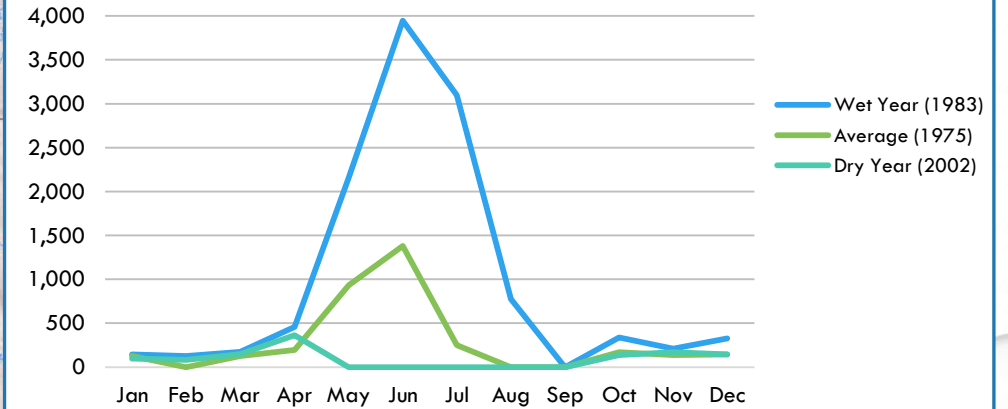




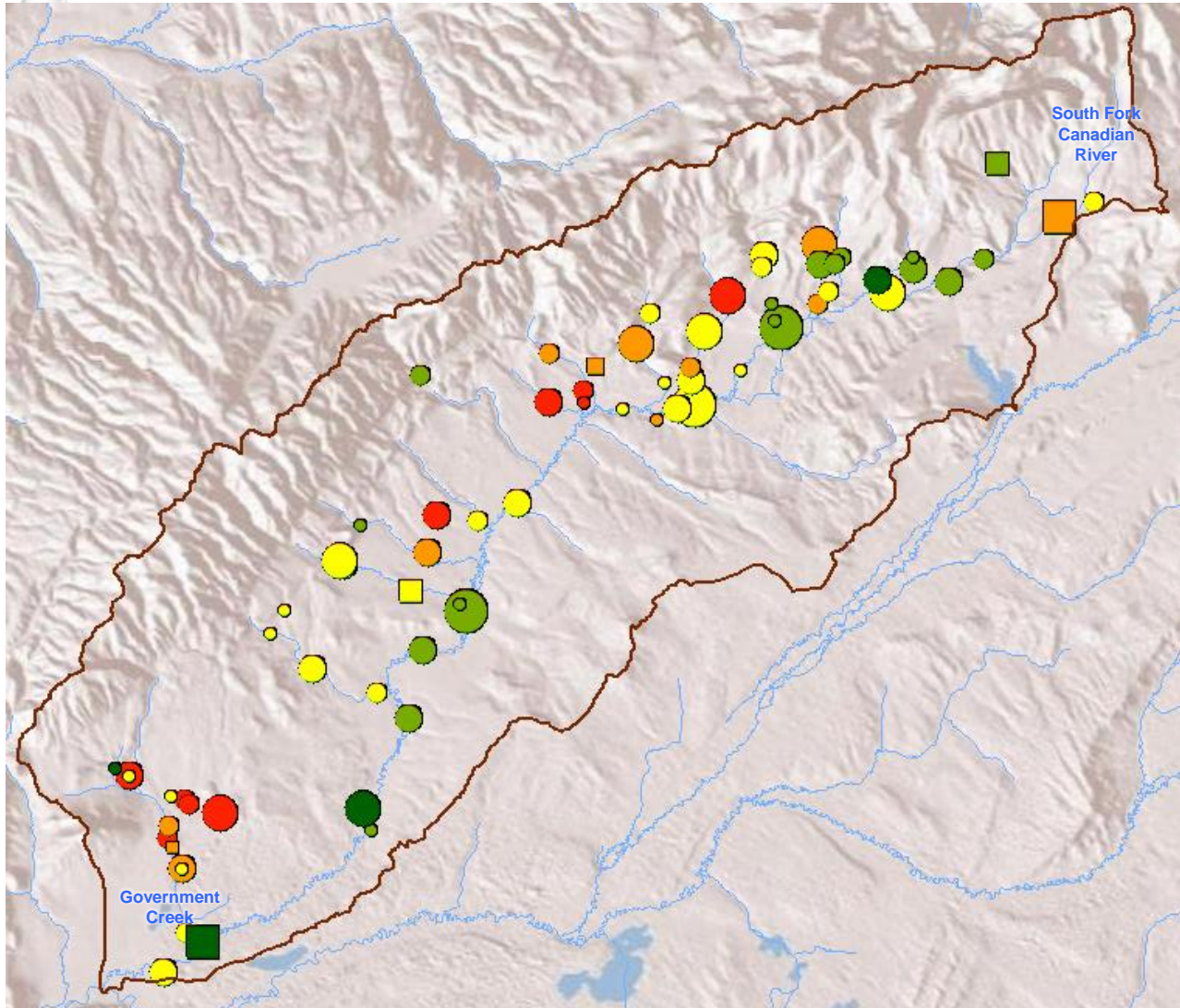
# LEGALLY AVAILABLE FLOW FOR THE CANADIAN SUB-BASIN



**Legally Available Flow - StateMod Model Output**  
**Acre-Feet per Month for Different Hydrologic Year Types**



# PERCENT SHORTAGE AND IRRIGATED ACREAGE



■ Diversion Systems

● Explicit Structures

## Crop Area Acres

- Less than 50 acres
- 50 to 100 acres
- 100 to 250 acres
- 250 to 500 acres
- More than 500 acres

## Percent Shortage

- 0 to 25
- 25 to 35
- 35 to 45
- 45 to 60
- 60 to 100