

#### **Importance of Meadow Restoration**





Before and After Meadow Restoration Photos



## CALIFORNIA BILL AB 2480

#### 108.5.

(a) It is hereby declared to be the established policy of the state that source watersheds are recognized and defined as integral components of California's water infrastructure.

(b)

- (1) As climate change advances, source watersheds that provide the majority of the state's drinking and irrigated agricultural water are of particular importance to maintaining the reliability, quantity, timing, and quality of California's environmental, drinking, and agricultural water supply.
- (2) Recognizing the critical role of source watersheds in enhancing water supply reliability, the maintenance and repair of source watersheds is eligible for the same forms of financing as other water collection and treatment infrastructure.



### **CALIFORNIA 2016 WATER PLAN**

Prioritized mountain meadows as a means to increase groundwater storage and habitat. This, in turn, has fueled federal agencies, local governments, conservation organizations, tribes, and others to take action.

- "Protect and restore degraded stream and meadow ecosystems to assist in natural water management and improved habitat. Meadows provide a natural storage opportunity, critically important with a changing climate, while properly functioning stream systems reduce downstream sedimentation and enhance critical aquatic habitat."
- "Restore Key Mountain Meadow Habitat: The Department of Fish and Wildlife, in coordination with other state resource agencies, will restore 10,000 acres of mountain meadow habitat in strategic locations in the Sierra Nevada and Cascade mountain ranges, which can increase groundwater storage and provide habitat for more than 100 native species, many of which are at risk as threatened or endangered. The department will also coordinate with federal agencies, local governments, conservation organizations, tribes, and others as necessary on this action to maximize efforts and avoid duplication."<sup>2</sup>



## **2016 CALIFORNIA LEGISLATION**

- California passed AB-2480, which recognizes California's watersheds as water infrastructure. This bill:
  - Allows for modern infrastructure financing
  - Use of infrastructure bonds
  - Simplifies corporate investment in watershed restoration
  - Watersheds and rivers will be valued on par with traditional water supply assets, i.e. pipes and levees <sup>3</sup>



### **MONTANA 2015 STATE WATER PLAN**

- A key recommendation in the State's water plan includes "Integrate Natural Storage to Benefit Water Supplies and Ecosystems"
  - Identified wetland and floodplain restoration as a step towards lessening the water supply and demand gap
  - "Existing natural systems, such as riparian areas, floodplains and wetlands act to slow runoff and promote groundwater recharge; effectively storing water and releasing it slowly back to the surface water system."
  - Water plan also lists short term and intermediate action items (next slide)
- State Water Plan defined Natural Storage of Water as "Storage of water in natural landscape features such as groundwater aquifers, ponds (including beaver ponds, floodplain ponds), wetlands and swales." 9



# MONTANA NATURAL STORAGE 2015 WATER PLAN ACTION ITEMS

- SHORT TERM RECOMMENDATIONS (0–2 YEARS)
  - DNRC will work with stakeholders to identify and develop at least one pilot project to quantify the capacity and explore the water right implications in smaller watersheds.
- INTERMEDIATE TERM RECOMMENDATIONS (2–6 YEARS)
  - DNRC will work with stakeholders to investigate the feasibility, cost effectiveness, and water right implications of using the natural storage capacity of wetlands, riparian areas, or floodplains to enhance water management in a smaller watershed.



# COLORADO 2015 WATER PLAN HOW DOES COLORADO COMPARE?

- Storage projects only include restoring and/or enlarging man-made water infrastructure (reservoirs and dams) and Aquifer Storage and Recovery
- Does not include language supporting natural storage solutions such as wetland and meadow restoration
- Does not include actions to restore mountain meadow habitats



# WHERE DOES MEADOW RESTORATION FIT IN COLORADO'S WATER PLAN?

- Water Supply and Demand Chap 6
  - Meadow restoration as a natural means to increase water supply during traditional "low flow" at the end of summer and early fall
- Water Supply Management Chap 6
  - Addition of meadows, wetlands, and floodplains as storage options
- Watershed Restoration Chap 7
  - Restoration of meadows, wetlands, and floodplains

