

ECOSYSTEM RESTORATION

California Water Plan workshop

July 11, 2008

OVERVIEW

- Focus on water-related ecosystems
- Includes physical processes
 - Flooding of floodplains
 - Erosion and deposition
 - Infiltration vs runoff
 - Seasonal variation in stream flow

Current Activities

- BDCP
- Delta Vision
- Ecosystem Restoration Program
- AFRP
- CVJV

Benefits

- Water supply
 - ESA conflicts
 - Meadow restoration
- Sustainability
 - Work with natural processes
 - Resilience and bio-diversity

Climate Change

- Less moisture available
- Geographic shifts
- Habitat shrinkage and isolation
- Exacerbate existing stresses

Adaptation

- Carbon sequestration
- Floodplain storage of water
- Habitat benefits

Flood Management Benefits

- Bypasses and setback levees = better
- Levee vegetation
- O'Connor Lakes
- Bear River

Complex Effects

- Forest restoration on floodplains
- Habitat -- climate change -- agriculture

Costs

- CBDA \$950 million
- Prop 84 \$1.4 billion
- Flood protection corridors \$290 million
- Restoration \$10 K per acre
- Meadows \$100-\$250 per acre-foot
- Life-cycle costs

Barriers to restoration

- Climate change
- Traditional flood management
- Conversion of farmland
- Instream flow needs
- Other ??????

Recommendations

- Integrate ER into flood and water projects
- Establish reserves that connect habitats
- Instream flows and needs
- Multidisciplinary approaches