Water for Irrigation Streams & Economy

Bear Creek and Little Butte Creek Watersheds

2013

Why WISE?

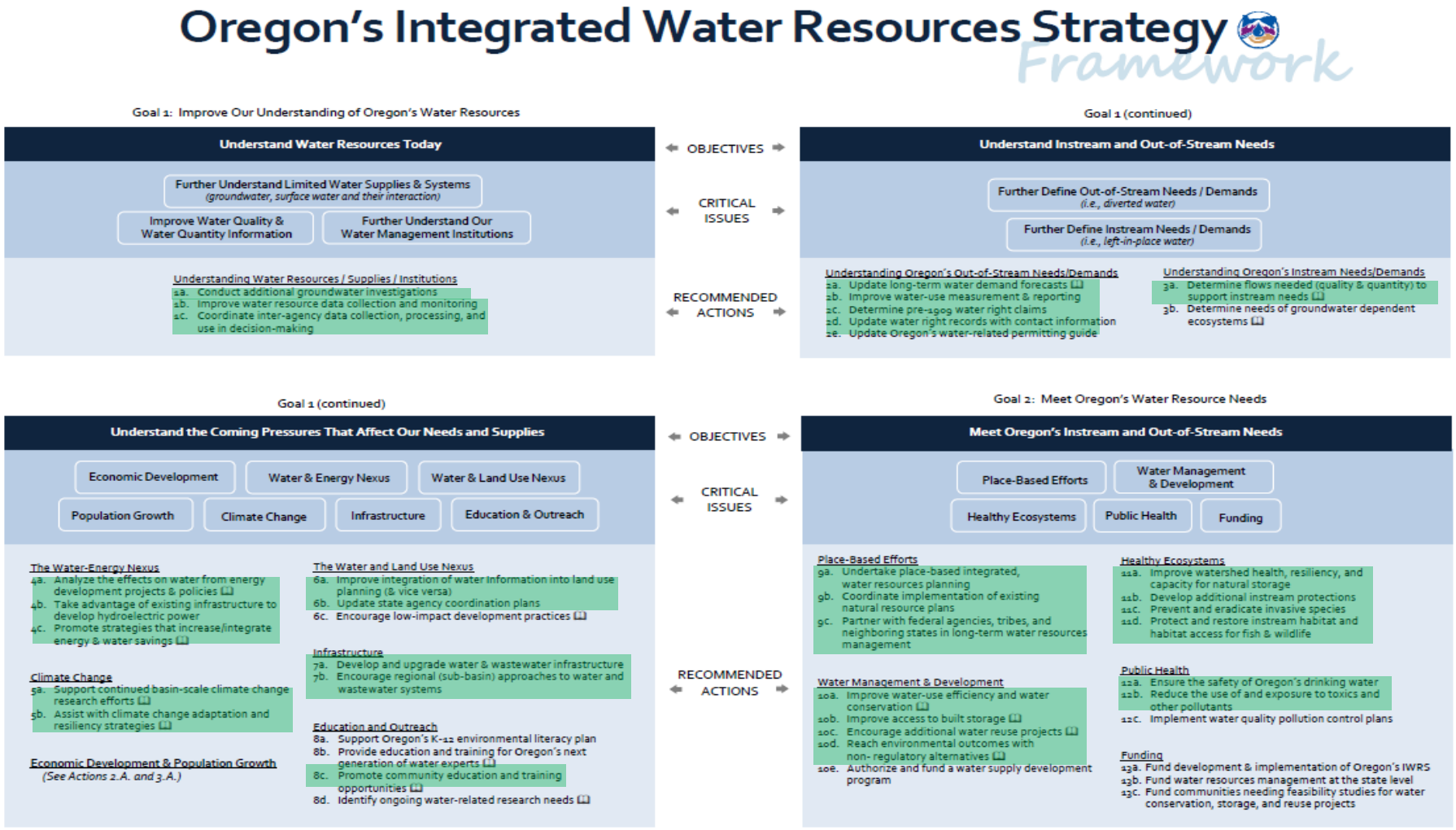
- 2001 water crisis in Klamath Basin
- Protect Agriculture amid urban growth
  - Open spaces
  - Economy
- Protect and restore local streams
  - Fisheries
  - Recreation
  - Economy

How WISE?

- Proactive approach
- Inclusive partnerships
- Think big
- And then think even bigger
- Long term solutions
  - Technology
  - Economies
  - Regulations

Water Strategy for the Future

Recommended Actions from Oregon's IWRS Framework



WISE Project Goals

- Increase summer stream flows
- Improve water quality
- Improve water temperature
- Improved irrigation water reliability
- Improved irrigation water availability

WISE Project Area

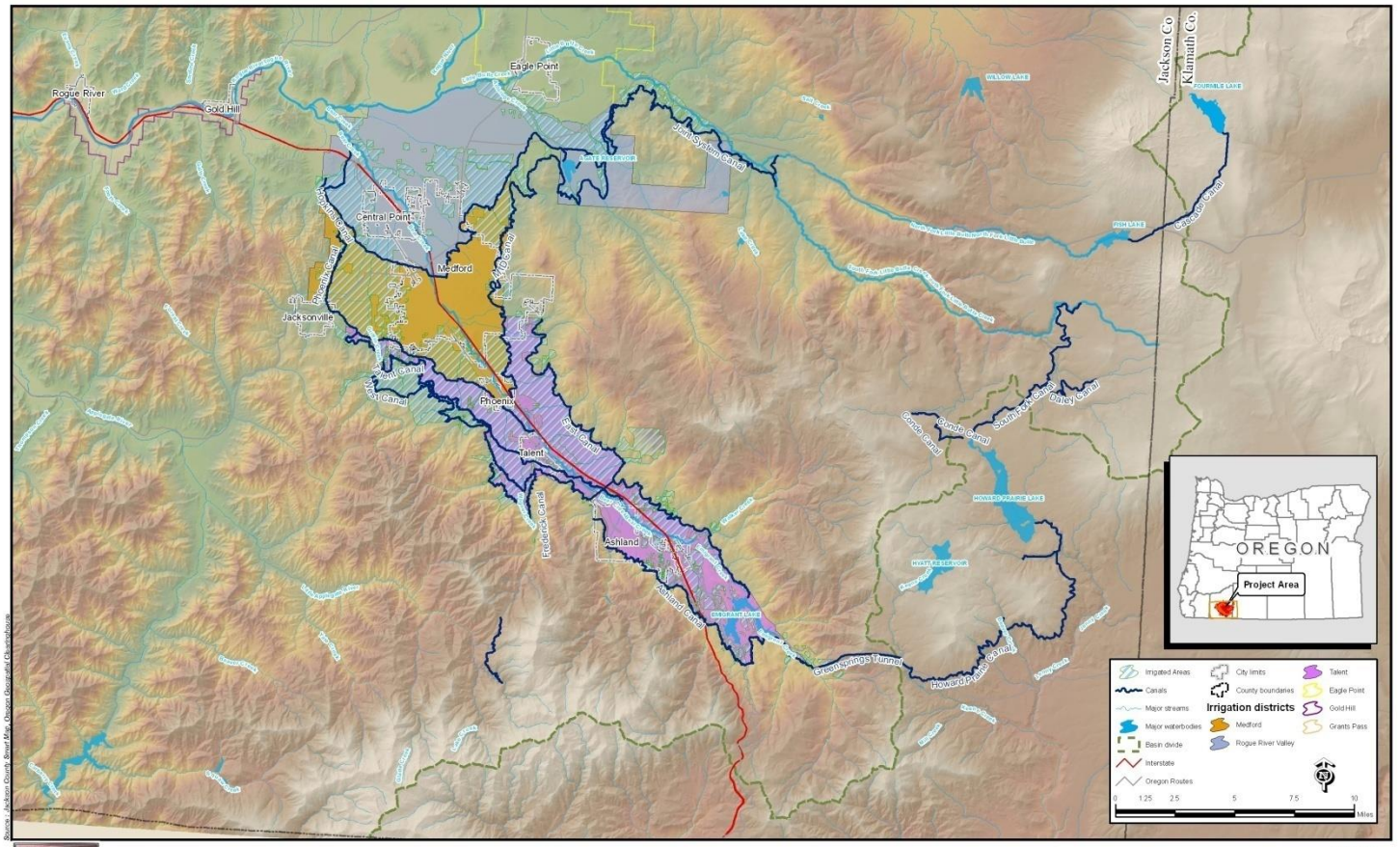


FIGURE 1-1
WISE Study Area and Land Use Features
WISE Preliminary Feasibility Study | City of Medford

Possible Sources of Additional Water

- Conserved Water
  - Piped/lined irrigation canals
- Increased reservoir storage capacity
  - Emigrant
  - Agate
- Pumped water
  - Regional Water Reclamation Facility
  - Lost Creek Reservoir via Rogue River

WISE Piping layouts

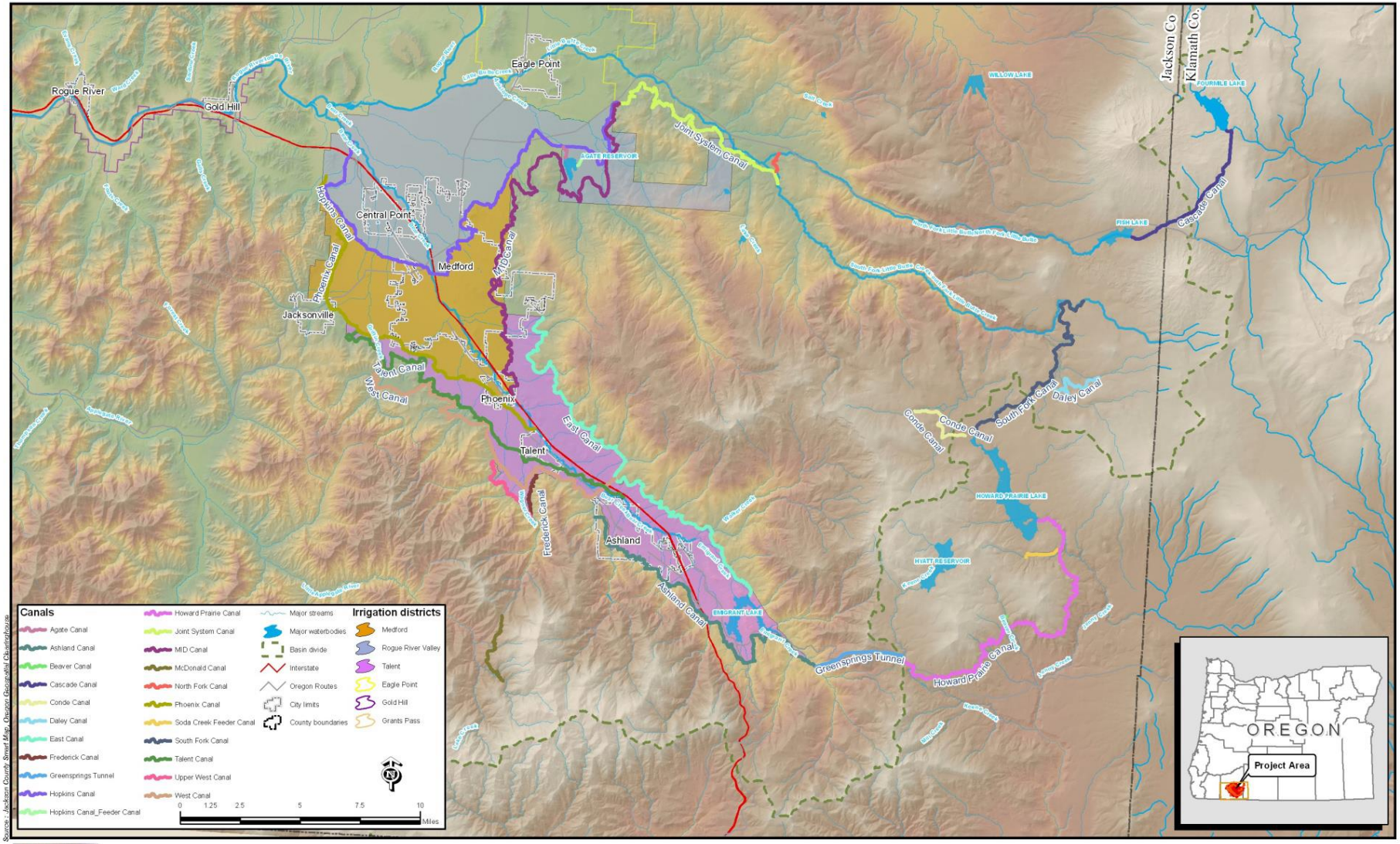


FIGURE 3-4
Conceptual Piping System for Option C3
WISE Preliminary Feasibility Study | City of Medford

ONE COMPANY *Many Solutions*℠

Specific Irrigation Benefits

- Conserved water available for irrigation
  - 22,297 – 30,998 – 39,710 (A/F)
- Gravity pressure system
- Reduced shortages
  - 77 – 4,674 – 8,019 (A/F)
- Extended drought protection
- More flexible water availability
- Minimal moss and algae in system
- Greatly reduced canal/pipe maintenance
- Hydropower generation

Instream Benefits

- More water instream
- Potentially increased flows in tribs
  - 2,193 – 9,895 – 20,207 (A/F)
  - Stored water component in reservoirs
  - Conserved water from surface rights
  - Water exchange from reuse component
- Elimination of mixed canal and live flows
- Significantly improved water quality

Issues

- Stormwater management
- Perceptions regarding use of Reclaimed effluent
- Environmental impacts – vernal pools, wetlands, canal-side vegetation
- Shallow wells

WISE Project Timeline

- 2010 – Complete Prefeasibility Study
- 2012 – Begin Cost Benefit Analysis
- 2013 – Begin FS/EIS
- 2013 – Complete CBA
- 2014 – Construct WISE Pilot Project
- 2016 – Complete FS/EIS

Because you asked …

- Conserved water
  - 22,297 – 30,998 – 39,710
- Reduced Shortages
  - 77 – 4,674 – 8,019
- Instream improvements
  - 2,193 – 9,895 – 20,207
- Total water improvements
  - **24,567 – 45,567 – 67,936**