Conveyance Alignment Comparison

Presented to:

BDCP Steering Committee

Presented by:

SAIC

April 24, 2009

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BDCP Steering Committee Process

- Feb-Aug 2007 Range of Conservation Concepts (Conservation Strategy Short-Listing Analysis Report - May 7, 2007)
- Sept 2007 Options Evaluation (Conservation Strategy Options Evaluation Report – September 17, 2007)
- Dec 2007 Points of Agreement (BDCP Points of Agreement for Continuing into the Planning Process – November 16, 2007)
- Jan-Dec 2008 Working Groups (Goals & Objectives WG, Analytical Tools TT, Conveyance WG, Habitat Restoration TT, Habitat and Operations TT, Fish Facilities TT, Other Stressors WG, Governance WG, Integration Team)
- Jan 2009 Overview of Conservation Strategy (An Overview of the Draft Conservation Strategy for the BDCP – January 12, 2009)
- Dual Conveyance
  - Eastern Canal Alignment
  - Western Canal Alignment

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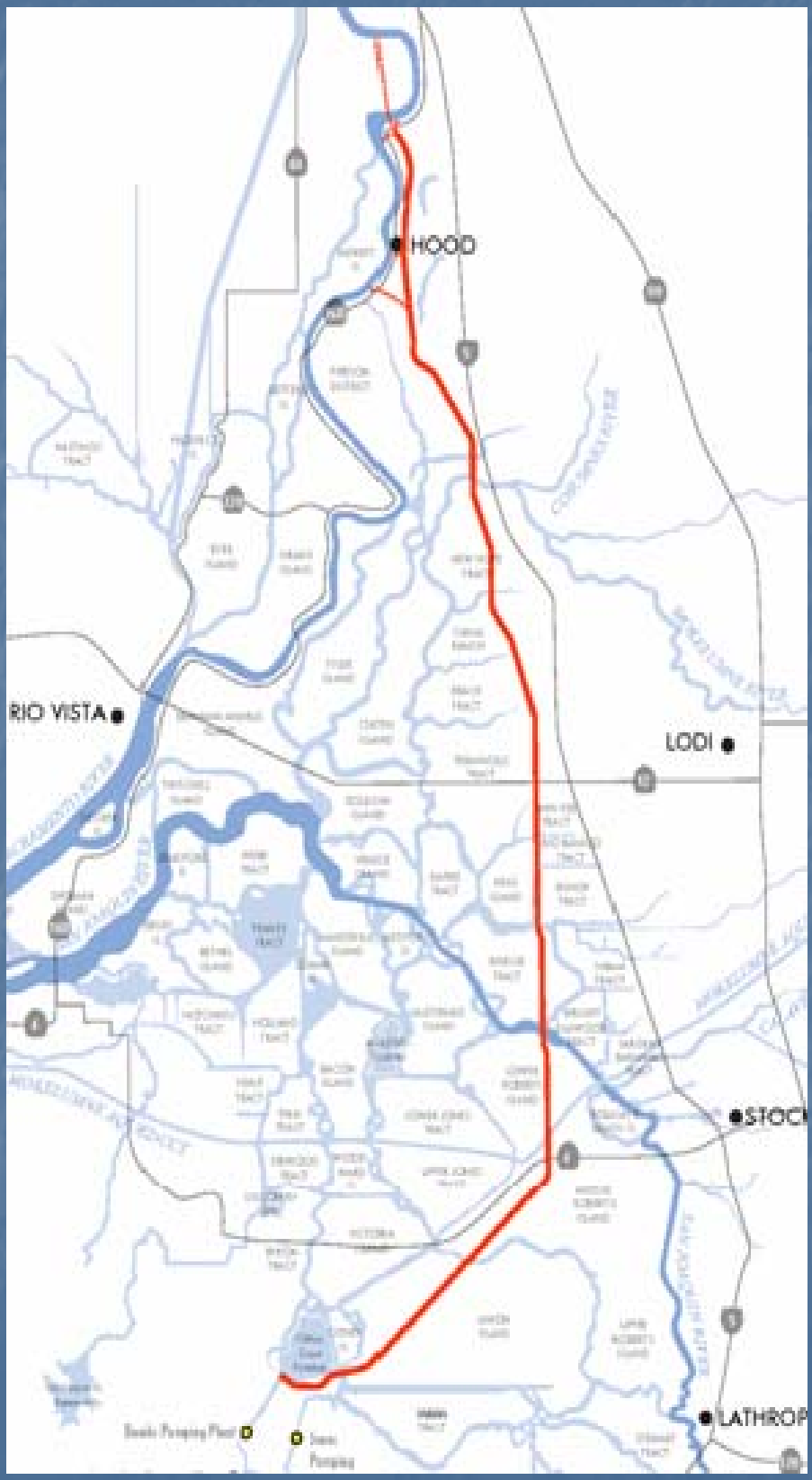
Eastern Conveyance Approach

15,000 cfs Canal as Part of a Dual Conveyance

- 5 Intakes at Sacramento River (3,000 cfs each)
- 5 Pump Stations (21’ Lift)
- 19 New Bridges (8 Major Roads and Railroad and 11 Other Road Crossings)
- One Intermediate Low Head Pump Station (31’ Lift)
- 49 Miles of Canals
- 4 Short Tunnels (2 miles total length)
- 8 Siphons
- 730 Acres Forebay/Ties



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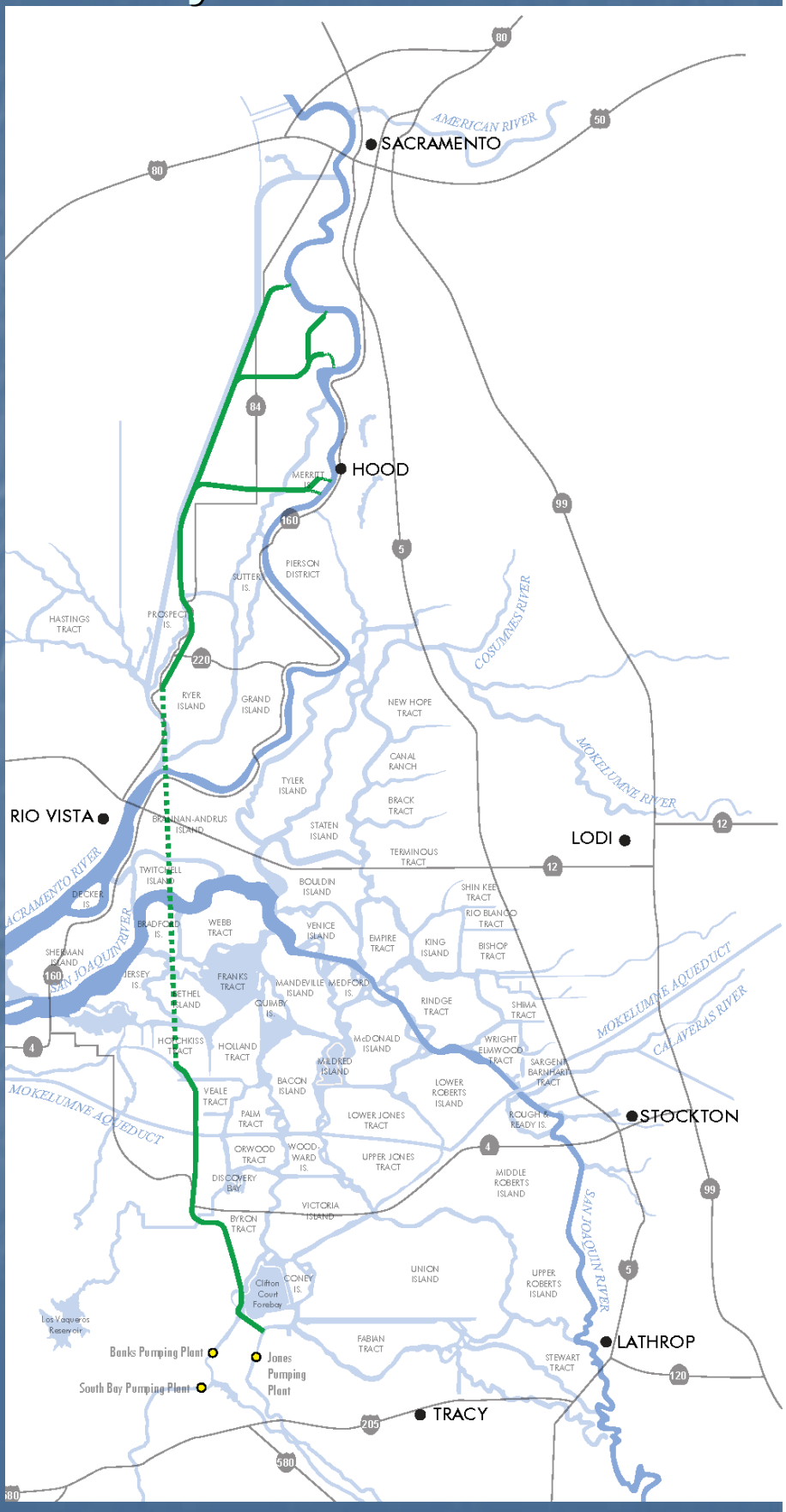
Western Conveyance Approach

15,000 cfs Canal & Tunnel as Part of a Dual Conveyance

- **Two sub-options for the reach adjacent to the Sacramento Deep Water Ship Channel:**
  a. **Adjacent to the Channel (shown)**
  b. **Use the Channel with more northern intakes**
- **5 Intakes on the Sacramento River (3,000 cfs each)**
- **5 Pump Stations (30' Lift)**
- **20 New Bridges (6 Major Roads and Railroad and 14 Other Road Crossings)**
- **One Intermediate Low Head Pump Station (65' Lift)**
- **34 Miles of Canals**
- **17 miles of long Tunnel**
- **12 Siphons**
- **720 Acres Forebay/Ties**



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SAIC's Rough Qualitative Comparison of BDCP Conveyance Alignments[1]

Consideration	Dual Conveyance Western Alignment[2]	Dual Conveyance Eastern Alignment
Direct Construction Costs	High	Medium
Construction Activities		
Schedule Uncertainty	High (long tunnel)	Medium (short tunnel)
Impacts (during construction)	Medium	Medium
Operations and Maintenance		
Operational Uncertainty	Low	Low
Peak Power Usage	High (85 ft lift)	Med (52 ft lift)
Major Unplanned Outage Duration	High	Low
Land Use Impacts		
Agriculture	High	High
Local Communities	Medium	Low
Cultural Resources	Low	Medium
Habitat Impacts		
Tidal Wetlands	Low	Low
Non-tidal Wetlands	Medium	Medium
Riparian	Medium	Medium
Upland	Medium	High

[1]BDCP has identified dual conveyance as the most promising approach for evaluation and therefore is not considering a "Through-Delta Only" configuration.
[2]Western Alignment is the canal and tunnel option and not the option that would use the Deep Water Ship Channel for conveyance because the aquatic impacts of that option do not meet the purposes of BDCP.

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