

## Comparison of East and West Isolated Conveyance Alignments<sup>1</sup>

(Generalized, rough comparison of some key considerations – see footnotes for sources of information.)

Considerations	East Side Alignment	West Side Alignment
Direct Cost – Construction (2007 estimates and dollars) <sup>2</sup>	\$4.2 to \$5.1 billion (being reevaluated)	\$7.4 to \$9.5 billion (being reevaluated)
Daily Operating Costs (2007 dollars) <sup>3</sup>	\$74,000/12 hr run-time based on 15,000 cfs	\$146,000/12 hr run-time based on 15,000 cfs
Electrical Power Usage a. during construction b. during operation	a. demand estimated at 1-2 MW on average during construction b. 52 ft lift requiring ~34 MW for Pump Plant(s) operating demand	a. demand estimated at 3 MW on average during construction b. 95 ft lift requiring ~68 MW for Pump Plant(s) operating demand
Construction Schedule Uncertainty	Low, due to short tunnel (2 miles)	High, due to long tunnel (17 miles)
Major Unplanned Outage	Design standards same so similar risk of failure. Shorter recovery time.	Design standards same so similar risk of failure. Longer recovery time.
Impact on Built Environment <sup>4</sup> a) Developed Lands b) Transportation/ Utilities c) Impacts on Navigation	a) 50 ac removed b) Intersects State Routes 160, 4, and 12; 33 local roads; 1 railroads; 1 -500Kv electric trans. line, 4-230Kv trans. lines, 2-115Kv trans. line; Mokelumne Aqueduct; 5 gas pipelines c) Primary water courses will use boring; secondary water courses impacted include Middle River, Beaver, Hog, Sycamore, White, Disappointment, and Snodgrass sloughs	a) 75 ac removed b) Intersects State Routes 4, 84, 220; 40 local roads; 5 railroads; Mokelumne Aqueduct, Old River Pipeline, Contra Costa Canal; 6 -500Kv electric trans. line, 1-115Kv trans. line; 3 gas pipelines c) Primary water courses will use boring; secondary water courses impacted include Babel, Elk, Miner, Rock, and Duck sloughs; Delta Mendota Canal Intake; Winchester Lake
Impact on Sensitive Natural Habitats <sup>5</sup> a) Riparian b) Natural Seasonal Wetland c) Managed Seasonal Wetland d) Tidal Marsh	a) Riparian: 90 ac permanent; 20 ac temporary b) Natural Seasonal Wetland: 10 ac. perm.; 0 ac. temp. c) Managed Seasonal Wetland: 50 ac. perm.; 15 ac. temp. d) Tidal Marsh: 10 ac. perm.; 10 ac. temp.	a) Riparian: 10 ac permanent; 20 ac temporary. b) Natural Seasonal Wetland: 30 ac. perm., 10 ac. temp. c) Managed Seasonal Wetland: 0 ac. perm.; 0 ac temp. d) Tidal Marsh: 0 ac. perm.; 10 ac. temp.
Impact on Tidal Habitat Restoration Opportunities	Negligible – could be constructed in tandem with East and South Delta ROA projects	Negligible – could be constructed in tandem with a new floodplain restoration along DWSC
Impact on Farmland <sup>6</sup> a) Annual Crops b) Perennial Crops	a) 3,900 ac of annual crops permanent, 200 ac temporary; b) 700 ac of perm, 10 ac temporary.	a) 3,400 ac of annual crops permanent, 150 ac temp.; b) 400 ac of perm, 40 ac temp.

<sup>1</sup> Alignments for east and west side conveyance as presented at 4/24/09 Steering Committee Meeting.

<sup>2</sup> Values based on Initial Assessment of Dual Conveyance report prepared by DWR for Delta Vision (June 2007).

<sup>3</sup> Values are preliminary estimates and will be dependent upon the cost of energy at a given point in time. Also, due to limitations on operational specificity, actual costs are unable to be provided and operational costs will vary based upon hydrologic conditions in any given year. Estimates assume operating costs for 70% operations.

<sup>4</sup> All values estimated and calculated based on the assumption of a direct conveyance facility footprint of 1,000-foot width around the alignment centerline. Developed lands are based on DFG 2007 Vegetation Cover Survey GIS as interpreted into the SAIC BDCP Natural Communities Data Layer.

<sup>5</sup> Habitats based on DFG 2007 Vegetation Cover Survey as interpreted into the SAIC BDCP Natural Communities Data Layer. Effects on habitats calculated based on the assumption of a direct conveyance facility footprint of 1,000-foot width around the alignment centerline. Temporary disturbance assumed where siphons or underground pipeline are identified for alignment. Permanent disturbance assumed where canal is identified. Tunnels were assumed to have no impact.

<sup>6</sup> Based on DWR 2007 Land Use Survey GIS data and addresses irrigated land only. Temporary disturbance assumed where siphons or underground pipelines are identified for alignment. Permanent disturbance assumed where canal is identified. Tunnels were assumed to have no impact. Effects calculated based on the assumption of a direct conveyance facility footprint of 1,000-foot width around the alignment centerline. Perennial crops include orchards and vineyards.