Table 1. Summary of Alternatives Considered for the City of Davis and UC Davis

Table 2. Summary of Alternatives Considered for the City of Woodland

Table 3. Summary of Alternatives Considered for the Davis Woodland Water Supply Project (Joint Project Between Davis, Woodland, and UC Davis)

Table 4. Summary of Intake Alternatives Considered for the Davis Woodland Water Supply Project

Table 1. Summary of Alternatives Considered for the City of Davis and UC Davis

Line	Alternative	Cost	Relative Cost[(a)]	Conclusions	Meet Project Objectives?[(b)]	Source
1-A	Convert to Partial Surface Water Supply from Expansion of West Sacramento Water Treatment Plant and Conjunctive Use w/Groundwater	Capital Cost $133,200,000 (2002 dollars)[(c)] $174,500,000 (mid 2009 dollars)	=	• Although this alternative was recommended in the 2002 Feasibility Study, the City of West Sacramento decided not to participate in a joint project with Davis and UC Davis, making this alternative infeasible.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 5)
1-B	Convert to Partial Surface Water Supply from Use of Available Capacity in West Sacramento Water Treatment Plant and Conjunctive Use w/Groundwater	Capital Cost 137,800,000 (2002 dollars)[(c)] $180,800,000 (mid 2009 dollars)	=	• In 2002, this alternative was not as attractive as Line 1-A because the water quality would not be as good as Line 1-A. • The City of West Sacramento decided not to participate in a joint project with Davis and UC Davis, making this alternative infeasible.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 3)
1-C	Convert to Partial Surface Water Supply by Use of Available Capacity in West Sacramento Water Treatment Plant and Conjunctive Use w/Groundwater, and use of Surface Water for Groundwater Recharge	Capital Cost 144,900,000 (2002 dollars)[(c)] $190,100,000 (mid 2009 dollars)	=	• In 2002, this alternative was not as attractive as Line 1-A because the water quality would not be as good as Line 1-A. • The City of West Sacramento decided not to participate in a joint project with Davis and UC Davis making this alternative infeasible.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 4)

Note: Anticipated cost for the Davis/UC Davis portion of the proposed project is $168,500,000.

(a) Cost Legend: (+): Significantly Greater than Proposed Project for Davis/UC Davis; (=): Approximately Equal to Proposed Project for Davis/UC Davis; (-): Somewhat Less than Proposed Project for Davis/UC Davis

(b) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

(c) ENR Construction Cost Index for 2002 and July 2009 were 6538 and 8578, respectively.

May 13, 2010

1-D	Convert Entirely to Surface Water Supply only using Expansion of West Sacramento Water Treatment Plant	Capital Cost $286,300,000 (2002 dollars) [(c)] $375,600,000 (mid 2009 dollars)	+	• This alternative would result in high financial costs (capital and total annualized costs) while only slightly improving water quality; there would only be one water supply, reducing reliability of the system, and initial negotiations with West Sacramento were unsuccessful. • The City of West Sacramento decided not to participate in a joint project with Davis and UC Davis, making this alternative infeasible.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 6)
1-E	Convert Entirely to Surface Water Supply only using a New Sacramento River Intake w/New Water Treatment Plant	Capital Cost $299,000,000 (2002 dollars) [(c)] $392,300,000 (mid 2009 dollars)	+	• This alternative would result in high financial costs (capital and total annualized costs) while only slightly improving water quality. Additionally, there would only be one water supply, which would reduce system reliability.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 7)
1-F	Continued Groundwater Use Supplemented with Surface Water from UCD's Solano Project Water	N/A	=	• Tchobanoglous and Schroeder recommended surface water from "Sacramento River and other sources", but did not specifically name the Solano Project Water in their recommendations. • UCD's Solano Project contract right is for 4,000 ac-ft/year. Because UCD plans to use this entire amount, no Solano Project water is available for Davis.	No – Would not provide water supply.	Review of City of Davis Water Resources Master Plan, Tchobanoglous and Schroeder, Feb 10, 2009
1-G	"Do Nothing/Do It Later" (i.e. Supply all demands with groundwater)	Capital Cost $71,900,000 (2002 dollars) [(c)] $94,300,000 (mid 2009 dollars) • This alternative would require the treatment of wastewater effluent to meet future State wastewater discharge requirements, which would increase the cost of this alternative to the $600 million range. See Line 3-B and 3-G.	+ (the wastewater must be treated)	• This alternative would result in a salt content that, without additional treatment, would be too high to meet wastewater standards and would not meet future drinking water standards (i.e. increased concerns with other water quality compounds such as nitrates, boron, selenium and arsenic.)	No – Would not improve drinking water quality; would not improve the quality of treated wastewater.	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 1)

Note: Anticipated cost for the Davis/UC Davis portion of the proposed project is $168,500,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project for Davis/UC Davis; (=): Approximately Equal to Proposed Project for Davis/UC Davis; (-): Somewhat Less than Proposed Project for Davis/UC Davis
(b) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040
(c) ENR Construction Cost Index for 2002 and July 2009 were 6538 and 8578, respectively.

May 13, 2010

1-H	Conservation Only	Similar cost as Line 1-G • This alternative would require the treatment of wastewater effluent to meet future State wastewater discharge requirements, which would increase the cost of this alternative to the $600 million range. See Line 3-B and 3-G.	+ (the wastewater must be treated)	• This alternative, without additional treatment, would result in higher salt concentrations in the wastewater effluent, making it increasingly difficult to meet wastewater standards. This alternative also would not address concerns with other water quality compounds such as nitrates, boron, selenium and arsenic. • Relying solely on conservation is not a feasible solution; however, conservation should be part of the overall solution (and is included in the recommended alternative).	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	DWWSP Community Report, December 2007 Review of City of Davis Water Resources Master Plan, Tchobanoglous and Schroeder, Feb 10, 2009

Note: Anticipated cost for the Davis/UC Davis portion of the proposed project is $168,500,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project for Davis/UC Davis; (=): Approximately Equal to Proposed Project for Davis/UC Davis; (-): Somewhat Less than Proposed Project for Davis/UC Davis
(b) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040
(c) ENR Construction Cost Index for 2002 and July 2009 were 6538 and 8578, respectively.

Table 2. Summary of Alternatives Considered for the City of Woodland

Line	Alternative	Cost	Relative Cost[(a)]	Conclusions	Meet Project Objectives?[(d)]	Source
2-A	Convert to Partial Surface Water Supply from Sacramento River Water for with Summer Supply Storage Reservoir and Conjunctive Use w/Groundwater	$87,000,000 (2004 dollars)[(b) (c)] $104,900,000 (mid 2009 dollars)	N/A[(b)]	• This alternative was preferred by the City of Woodland in 2004. • The City later reconsidered when they became more fully aware of the amount of land needed for summer water storage, the seepage and evaporation losses, the concern about the growth of algae and water quality problems related to treatment (mainly taste and odor issues).	Yes – But could have taste and odor problems in summer months.	City of Woodland Surface Water Feasibility Study, June 2004 (Alternative 2b)
2-B	Provide Sacramento River Water for Agricultural Irrigation Use Only	$50,000,000 (2004 dollars) [(b) (c)] $60,300,000 (mid 2009 dollars)	N/A[(b)]	• This alternative would provide expensive water for agricultural users, so there would be little incentive for them to participate without substantial subsidies. Implementation of this alternative would be complex, requiring multiple easements across private land. • This alternative would not resolve the wastewater discharge or drinking water quality issues.	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	City of Woodland Surface Water Feasibility Study, June 2004 (Alternative 1)
2-C	Convert to Partial Surface Water Supply from Sacramento River Water with No Summer Water Storage and Conjunctive Use w/Groundwater	$74,000,000 (2004 dollars) [(b) (c)] $89,200,000 (mid 2009 dollars)	N/A[(b)]	• While this alternative was recommended by the engineers who did the Water Feasibility Study (LTD), the City of Woodland preferred Line 2-A in 2004.	No – Would not improve drinking water quality or treated wastewater quality in the summer months.	City of Woodland Surface Water Feasibility Study, June 2004 (Alternative 2a)

Note: Anticipated cost for the Woodland portion of the proposed project is $157,00,000.

(a) Cost Legend: (+): Significantly Greater than Proposed Project for Woodland; (=): Approximately Equal to Proposed Project for Woodland; (-): Somewhat Less than Proposed Project for Woodland

(b) Costs from the 2004 Feasibility Study are significantly less than current cost estimates by the WDCWA project team and should not be directly compared to the current project.

(c) ENR Construction Cost Index for 2004 and July 2009 were 7115 and 8578, respectively. The ENR CCI for October 2007 was 8045.

(d) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

2-D	Convert to Partial Surface Water Supply from Sacramento River Water for Municipal Use w/Conjunctive Use of Groundwater and Agricultural Irrigation w/Surface Water	$75,000,000 (2004 dollars) [b] [c] $90,400,000 (mid 2009 dollars)	N/A[b]	• This alternative offers some of the benefits of Lines 1-E, 2-B, and 2-C, but contains all of the disadvantages of them as well, including greater complexity to implement, constructing a WTP, a reservoir for irrigation, and distribution and operation and maintenance systems for both municipal and irrigation uses.	No – Would not improve drinking water quality or treated wastewater quality in the summer months.	City of Woodland Surface Water Feasibility Study, June 2004 (Alternative 3)
2-E	Remote Well Field to Provide Entire Municipal Supply	N/A	N/A[b]	• City of Woodland analyzed a remote well field concurrently with the Surface Water Feasibility Study, ("Remote Well Field Feasibility Study", GeoTrans, 2002). Subsequently, the City decided a remote well field was not a viable alternative to the current practice of placing wells throughout the City.	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	City of Woodland Surface Water Feasibility Study, June 2004 (Discussed on page 40)
2-F	"Do Nothing/Do It Later" (i.e. Supply all demands with groundwater)	$84,000,000 for repair and replacement of existing and new groundwater facilities (Oct 2007 dollars) [c] Mid 2009 cost = $90,000,000 • This alternative would require the treatment of wastewater effluent to meet future State wastewater discharge requirements, which would increase the cost of this alternative to the $600 million range. See Line 3-B and 3-G.	+ (the wastewater must be treated)	• This alternative would result in a salt content that, without additional treatment, would be too high to meet wastewater standards and would not meet future drinking water standards (i.e. increased concerns with other water quality compounds such as nitrates, boron, selenium and arsenic.)	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	TM – Davis-Woodland Water Supply Project, Information and Analysis Related to the City of Woodland's Question "Why Surface Water & Why Now", October 2007
2-G	Conservation Only	Similar cost as Line 2-F • This alternative would require the treatment of wastewater effluent to meet future State wastewater discharge requirements, which would increase the cost of this alternative to the $600 million range. See Line 3-B and 3-G.	+ (the wastewater must be treated)	• This alternative, without additional treatment, would result in higher salt concentrations in the wastewater effluent, making it increasingly difficult to meet wastewater standards. This alternative also would not address concerns with other water quality compounds such as nitrates, boron, selenium and arsenic. • Relying solely on conservation is not a feasible solution; however, conservation should be part of the overall solution (and is included in the recommended alternative).	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	DWWSP Community Report, December 2007

Note: Anticipated cost for the Woodland portion of the proposed project is $157,00,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project for Woodland; (=): Approximately Equal to Proposed Project for Woodland; (-): Somewhat Less than Proposed Project for Woodland
(b) Costs from the 2004 Feasibility Study are significantly less than current cost estimates by the WDCWA project team and should not be directly compared to the current project.
(c) ENR Construction Cost Index for 2004 and July 2009 were 7115 and 8578, respectively. The ENR CCI for October 2007 was 8045.
(d) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

Table 3. Summary of Alternatives Considered for the Davis Woodland Water Supply Project (Joint Project Between Davis, Woodland, and UC Davis)

Line	Alternative	Cost	Relative Cost[(a)]	Conclusions	Meet Project Objectives?[(d)]	Source
3-A	Convert to Partial Surface Water Supply from Sacramento River Intake w/New WTP and Conjunctive Use w/Groundwater (Proposed Project)	$325,000,000 (mid 2009 dollars) – including $43,000,000 (mid 2009 dollars – TCC TM) for diversion and conveyance to the WTP Woodland Cost: $157,000,000 Davis Cost: $151,000,000 UC Davis Cost: $17,000,000	=	• This is the proposed project. • Acquiring a surface water supply is the first recommendation in the Tchobanoglous and Schroeder report • A portion of the water diverted will be through the project's own water rights, and a portion will be acquired through water purchases.	Yes	TM – Davis-Woodland Water Supply Project: Delivery Schedule/Financing Alternatives Evaluation, November 4, 2009 Review of City of Davis Water Resources Master Plan, Tchobanoglous and Schroeder, Feb 10, 2009
3-B	Wellhead Treatment of Groundwater Supplies, Pipeline Brine Disposal	Woodland Cost: $590,000,000 (Oct 2007 dollars)[(b)] Mid 2009 cost = $629,000,000 Davis Cost [(c)] : $394,000,000 (Oct 2007 dollars) Mid 2009 cost = $420,000,000 Total = $1,049,000,000.	+	• Treatment of groundwater supplies would require a lot of energy (and a correspondingly high "carbon footprint") to remove salts from the water. Once the salt was removed, the resulting brine stream would be very expensive to dispose. Additionally, it would be very difficult, if not impossible, to locate land adjacent to or even near each well to install treatment facilities.	Yes	TM – Davis-Woodland Water Supply Project, Information and Analysis Related to the City of Woodland's Question "Why Surface Water & Why Now", October 2007 DWWSP Community Report, Spring 2010 Redraft 2007 DWWSP Draft EIR, § 5.2.3
3-C	Wellhead Treatment of Groundwater Supplies w/Brine Ponds	N/A – Costs for this alternative were not computed because the area required for brine ponds (3,000 acres) was considered infeasible.	+	• This alternative would not be feasible because it would require purchase of a very large area for the brine ponds. • Additionally, the brine pond water would contain high salt loads and contaminants, including selenium. The expected high concentrations of selenium could have negative effects on waterfowl and other birds similar to those that occurred at Kesterson Reservoir when it received agricultural drainage water.	Yes	Discussions as part of the City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 Discussions as part of the Davis Woodland Water Supply Project, 2007

Note: Anticipated cost for the proposed project is $325,000,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project; (=): Approximately Equal to Proposed Project; (-): Somewhat Less than Proposed Project
(b) ENR Construction Cost Index for October 2007 and July 2009 were 8045 and 8578, respectively.
(c) Davis Cost was calculated by West Yost Associates but never published in any official document.
(d) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

May 13, 2010

3-D	Wellhead Treatment of Groundwater Supplies, Brine Injection Wells	N/A – Costs for this alternative were not computed because injecting brine into the ground is prohibited by a Yolo County ordinance.	+	• This alternative would have similar concerns as Line 3-B, and brine injection is prohibited in Yolo County.	Yes	Discussions as part of the City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 Discussions as part of the Davis Woodland Water Supply Project, 2007 2007 DWWSP Draft EIR, § 5.2.3
3-E	Wellhead Treatment of Groundwater Supplies, Brine Disposal by Truck	Trucking costs alone for this alternative were estimated to be $86,000,000 to over $180,000,000 per year (in 2006 dollars). Costs were based on 6,000 gallon trucks making 430 to 900 trips per day.	+	• This alternative would have similar concerns as Line 3-B, and trucking was determined to be too expensive and impractical, and would produce significant environmental impacts.	Yes	2007 DWWSP Draft EIR, § 5.2.3
3-F	Groundwater Treatment at Two New Water Treatment Plants (WTP's)	N/A – This alternative was considered infeasible because of the high cost associated with disposal of the brine and extensive piping infrastructure that would be required to connect the water treatment plants and distribution system piping.	+	• This alternative would result in high energy use, high cost of brine disposal, and high cost of infrastructure improvements required to get water from the wells to the WTP's and from the WTP's to the system users.	Yes	2007 DWWSP Draft EIR, § 5.2.3
3-G	Treatment of Wastewater Effluent	N/A – Costs for this alternative would be similar to Line 3-B. This alternative would also need a pipeline to dispose of the brine and the pipeline is a significant portion of the Line 3-B cost. While there may be cost savings by requiring a few large units at the treatment plants, these savings would be offset by the need to provide redundancy and the need to treat the higher salt loading produced by water system user water softeners.	+	• This alternative would have similar concerns as Line 3-B. • In addition, treating the wastewater would not be as beneficial to water system users as Line 3-B because their water supply would still contain elevated salt levels.	No – Would not improve drinking water quality.	DWWSP Community Report, Spring 2010 Redraft

Note: Anticipated cost for the proposed project is $325,000,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project; (=): Approximately Equal to Proposed Project; (-): Somewhat Less than Proposed Project
(b) ENR Construction Cost Index for October 2007 and July 2009 were 8045 and 8578, respectively.
(c) Davis Cost was calculated by West Yost Associates but never published in any official document.
(d) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

May 13, 2010

3-H	"Do Nothing/Do It Later" (i.e. Supply all demands with groundwater)	$184,300,000 (Based on $90,000,000 (per Line 2-F) and $94,300,000 (per 1-G)) • This alternative would require the treatment of wastewater effluent to meet future State wastewater discharge requirements, which would increase the cost of this alternative to the $600 million range. See Line 3-B and 3-G.	+ (the wastewater must be treated)	• This alternative would result in a salt content that, without additional treatment, would be too high to meet wastewater standards and would not meet future drinking water standards (i.e. increased concerns with other water quality compounds such as nitrates, boron, selenium and arsenic.)	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	TM – Davis-Woodland Water Supply Project, Information and Analysis Related to the City of Woodland's Question "Why Surface Water & Why Now", October 2007 DWWSP Community Report, December 2007 2007 DWWSP Draft EIR, § 5.2.3
3-I	Conservation Only	Similar cost as Line 3-H • This alternative would require the treatment of wastewater effluent to meet future State wastewater discharge requirements, which would increase the cost of this alternative to the $600 million range. See Line 3-B and 3-G.	+ (the wastewater must be treated)	• This alternative, without additional treatment, would result in higher salt concentrations in the wastewater effluent, making it increasingly difficult to meet wastewater standards. This alternative also would not address concerns with other water quality compounds such as nitrates, boron, selenium and arsenic. • Relying solely on conservation is not a feasible solution; however, conservation should be part of the overall solution (and is included in the recommended alternative).	No – Would not improve drinking water quality; would not improve quality of treated wastewater.	DWWSP Community Report, December 2007 Review of City of Davis Water Resources Master Plan, Tchobanoglous and Schroeder, Feb 10, 2009 2007 DWWSP Draft EIR, § 5.2.4

Note: Anticipated cost for the proposed project is $325,000,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project; (=): Approximately Equal to Proposed Project; (-): Somewhat Less than Proposed Project
(b) ENR Construction Cost Index for October 2007 and July 2009 were 8045 and 8578, respectively.
(c) Davis Cost was calculated by West Yost Associates but never published in any official document.
(d) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

Table 4. Summary of Intake Alternatives Considered for the Davis Woodland Water Supply Project

Line	Alternative	Cost	Relative Cost[(a)]	Conclusions	Meet Project Objectives?[(b)]	Source
4-A	This alternative is the same as Line 3-A. Convert to Partial Surface Water Supply from Sacramento River Joint Intake w/RD 2035, New WTP near Woodland, and Conjunctive Use w/Groundwater (Proposed Project)	$325,000,000 (mid 2009 dollars) – including $43,000,000 (mid 2009 dollars – TCC TM) for diversion and conveyance to the WTP	=	• This is the proposed project. • Acquiring a surface water supply is the first recommendation in the Tchobanoglous and Schroeder report	Yes	TM – Davis-Woodland Water Supply Project: Delivery Schedule/Financing Alternatives Evaluation, November 4, 2009 Review of City of Davis Water Resources Master Plan, Tchobanoglous and Schroeder, Feb 10, 2009
4-B	This alternative is the similar to Lines 1A-1D. Convert to Partial Surface Water Supply from Sacramento River Intake at West Sacramento, Use West Sacramento WTP, and Conjunctive Use w/Groundwater	Cost varies between $175,000,000 and $375,000,000 (mid 2009 dollars) depending on amount of expansion at the West Sacramento WTP. Cost is for only the Davis/UC Davis portion. See Lines 1-A through 1-D	+	• The City of West Sacramento decided not to participate in a joint project with Davis and UC Davis, making this alternative infeasible.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternatives 3, 4, 5, and 6)
4-C	This alternative is the same as Line 1-E. Convert to Partial Surface Water Supply from a New Sacramento River Intake (located between Vietnam Veterans Bridge and West Sacramento) and a New WTP at Davis WWTP site, and Conjunctive Use w/Groundwater	$392,300,000 (mid 2009 dollars) for Davis/UC Davis portion only. See Line 1-E.	+	• This alternative would result in high financial costs (capital and total annualized costs) while only slightly improving water quality. Additionally, there would only be one water supply, which would reduce system reliability.	Yes	City of Davis and UC Davis Joint Water Supply Feasibility Study, 2002 (Alternative 7)

Note: Anticipated cost for the proposed project is $325,000,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project; (=): Approximately Equal to Proposed Project; (-): Somewhat Less than Proposed Project
(b) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

May 13, 2010

4-D	Convert to Partial Surface Water Supply w/Sacramento River - Tehama-Colusa Canal Pipeline Intake Alternative	$398,000,000 (mid 2009 dollars) – including $116,000,000 (mid 2009 dollars – TCC TM) for diversion and conveyance to the WTP	+	• The TCC alternative included a diversion facility and raw water pipelines that would cost more than 2.5 times the capital cost of an intake on the Sacramento River and raw water pipeline associated with the proposed project. • The uncertainties in water rights, municipal water delivery priority through agricultural conveyance facilities, and conveyance costs were considered to be matters that would require extensive negotiations and likely increase capital costs further, increase overall operational costs, and complicate and delay DWWSP implementation.	No – Could not meet schedule requirements	TM - Davis-Woodland Water Supply Project, Additional Evaluation of Tehama-Colusa Canal as Potential Surface Water Intake, November 20, 2009
4-E	Add Water Supply w/Ranney Collectors near Sacramento River and New Water Treatment Plant	$59,000,000-$81,000,000 *For intake only. Does not include additional property acquisition that is likely to be required.*	+	• The capacity of the Ranney Collectors is unknown; therefore the quantity required for the Project is unknown. • The raw water quality is unknown and has the potential to provide a water with a higher mineral concentration (as measured by TDS) than other Intake options. • This alternative does not lend itself to pilot testing of a preferred process train at the WTP. Therefore, costs for the WTP are unknown. • There are numerous unknowns (listed above) with this alternative and would require expensive and time consuming field investigations to resolve them all. As a result, this alternative would delay the schedule and put the project at too much risk.	Yes	TM- Alternative Sacramento River Intake Evaluation, May 2010

Note: Anticipated cost for the proposed project is $325,000,000.
(a) Cost Legend: (+): Significantly Greater than Proposed Project; (=): Approximately Equal to Proposed Project; (-): Somewhat Less than Proposed Project
(b) Project Objectives: (1) Provide reliable water supply to meet existing and future needs, (2) Improve water quality for drinking, (3) Improve quality of treated wastewater through 2040

May 13, 2010