State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

PETITION FOR EXTENSION OF TIME

WATER USERS: Carmichael Water District

Application 12367 Permit 7356

Water Code section 1396 requires an applicant to exercise due diligence in developing a water supply for beneficial use. The State Water Resources Control Board (SWRCB), in considering requests for extension of time, will review the facts presented to determine whether there is good cause for granting an extension of time to complete the project. Where diligence in completing the project is not fully substantiated, the SWRCB may set the matter for hearing to determine the facts upon which to base formal action relating to the permit. Formal action may involve:

1. Revoking the permit for failure to proceed with due diligence in completing the project.
2. Issuing a license for the amount of water heretofore placed to beneficial use under the terms of the permit.
3. Granting a reasonable extension of time to complete construction work and/or full beneficial use of water.

The time previously allowed in your permit within which to complete construction work and/or use of water has either expired or will expire shortly.

Please check below the action you wish taken on this permit.

☐ The project has been abandoned and I request revocation of the permit.

_____
Signature

☐ Full use of water has been made, both as to amount and season, and I request license be issued.

_____
Signature

☒ The project is not yet complete. I request the SWRCB's consideration of the following petition for an extension of time.

PETITION FOR EXTENSION OF TIME
If START of construction has been delayed

Complete items 1, 2, and 3. N/A

1. What has been done since permit was issued toward commencing construction?

2. Estimate date construction work will begin.

3. Reasons why construction work was not begun within the time allowed by the permit.

"The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demands and cut your energy costs, see our web-site at: http://waterrights.ca.gov.*" Additional copies of this form and water right information can be obtained at www.waterrights.ca.gov.*

Continued on next page

12/23/05 $1,000.00 CW

PETITION FOR EXTENSION OF TIME
If construction work is proceeding

If construction work and/or use of water is proceeding but is not complete, an extension of time may be petitioned by completing items 4 through 16. Statements must be restricted to construction or use of water only under this permit.

4. A 20 - year extension of time is requested to complete construction work and/or beneficial use of water. (Indicate a period of time less than or equal to 10 years. Must be consistent with the time frame allowed in (California Code of Regulations sections 840 through 844)

5. How much water has been used? See Supplement acre-feet/year _____ cfs

6. How many acres have been irrigated? See Supplement

7. How many houses or people have been served water? 11,361 residential connections, 43,880 people

8. Extent of past use of water for any other purpose. 897 AF Commercial; 1,000 AF Landscape/Recreational

9. What construction work has been completed during the last extension? See Supplement

10. Approximate amount spent on project during last extension period. $30 million plus

11. Estimate date construction work will be completed. See Supplement

12. Estimated year in which water will be fully used. 2025

13. Reasons why construction and/or use of water were not completed within time previously allowed. See Supplement

If the use of water is for municipal (including industrial) and irrigation supplies and is provided or regulated by public agencies and use of the water has commenced, but additional time is needed to reach full use contemplated, the following information must be provided.

14. What water conservation measures are in effect or feasible within the place of use?
See Supplement

15. How much water is being conserved or is it feasible to conserve using these conservation measures?
5,713-6,226 acre-feet per annum.

16. How much water per capita is used during the maximum 30-day period? 533 gpd.

I (we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.

Dated: _____, 20___, at _____, California

Steve M. Nugent

Signature(s) Telephone No.

Steven M. Nugent 7837 Fair Oaks Blvd.

PLEASE PRINT YOUR NAME AND ADDRESS

NOTE: A **$1,000 filing fee**, for each Application listed, made payable to the State Water Resources Control Board must accompany a petition for an extension of time. An **$850 fee** made payable to the Department of Fish and Game must accompany all but the first petition for an extension of time.

SUPPLEMENT TO PETITION FOR EXTENSION OF TIME
APPLICATION 12637, PERMIT 7356

INTRODUCTION AND SUMMARY

In July 1996, the SWRCB granted Carmichael Water District ("District") an extension of time to December 31, 2005 in which to complete beneficial use of water under Permit 7356 (App. No. 12367). Since then, the District has spent millions of dollars to upgrade its treated surface water quality in order to comply with a Compliance Order from the Department of Health Services, including the construction of a state of the art water treatment facility in 2001. The completion of the water treatment plant coincided with completion of a 100-year Water Facilities Master Plan describing the continuing reliance on a conjunctive supply plan using both surface water and groundwater resources to meet District water demands. The Plan calls for replacement of several aging groundwater wells with new facilities as part of supply planning for the next 20 years.

Recently discovered groundwater contamination threatens the District's groundwater supply and planned development of groundwater resources. The contamination has been associated with the nearby Aerojet Corporation facility. Local water purveyors have closed numerous public water supply wells south of the District due to this contamination. The Aerojet contamination plume will likely force the District to shift to more surface water use over the next 20-years and will result in the District more fully using its surface water allocation under Permit 7356 than it currently uses.

GROUNDWATER CONTAMINATION

In 1979, industrial solvents were discovered in drinking water wells near the Aerojet facility (an active weapons and aerospace propulsion manufacturing facility) located south of the

American River in Rancho Cordova. Aerojet has installed and operates several systems to pump out and treat contaminated groundwater south of the American River. Although Aerojet fully anticipated containment of the plume prior to reaching areas north of the American River and the District, recent detection of N-Nitrosodimethalamine (NDMA) within the District has resulted in a reassessment of the long-term sustainability of groundwater production. The District water supply planning has also been impacted by this groundwater contamination.

Regulatory oversight for the containment and cleanup of contamination originating from the Aerojet site is being conducted by the United States Environmental Protection Agency (USEPA) in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and as amended by the Superfund Amendments and Reauthorization Act (SARA). The USEPA issued a Unilateral Administrative Order (UAO) that requires Aerojet to construct groundwater extraction and treatment system(s) to prevent chemicals of concern from migrating into District groundwater facilities and to restore the groundwater aquifer to cleanup levels defined by the USEPA in the UAO. In 2003, groundwater contamination was discovered north of the American River and further sampling showed that the contamination extends from the south, northwest under the American River, and below the southern edge of the District.

Contaminants were detected in one of the monitoring wells constructed on the north side of the American River within the District. This detection triggered construction of five (5) additional monitoring wells by the end of December 2005. These wells are located downgradient of the anticipated extent of the plume. Sampling from a total of five (5) of the eight (8) monitoring wells have tested positive for contaminants of concern associated with the Aerojet site. The figure attached in Exhibit A shows the approximate known extent of the contaminant plume. The positive detection of contaminants within the District confirms the plume has

migrated under the American River and is traveling downgradient through the District. To date the groundwater contamination has not reached District drinking water supply wells. The extent of the contamination, movement rate and direction of the plume are currently being evaluated by the potential responsible party and have not yet been completed.

The District, Aerojet Corporation, EPA, California Department of Toxic Substance Control (DTSC), Regional Water Quality Control Board, and the County of Sacramento are working together to aggressively install extraction and treatment facilities to limit future migration of contamination. In a worst-case scenario, the District could be forced to abandon all wells or rely on surface water as its sole source of supply. Treatment of contaminated groundwater for public water supply may ultimately also be required to address water supply shortages.

The District is at risk of losing groundwater production capacity and it is highly probable that a significant portion of the District's water supply provided by groundwater may be lost due to this contamination problem. The effectiveness of Aerojet's historical remediation efforts has been less than positive and has failed to achieve the containment goals. Remediation and reuse potential for the contaminated groundwater supply is not clear at this time. Thus, as the District relies less and less on groundwater in the future, the District's surface water supply will become critical to maintain. If the loss of groundwater supply to the District becomes a reality, the amount of surface water used by the District will increase from what is presently used by the District under Permit 7356. For this reason, the District is submitting a Petition for and Extension of Time for currently permitted water supplies.

DISTRICT REGIONAL PLANNING AND THE WATER FORUM PROCESS

The District has actively planned for its future through various studies, master plans and participation in the regional Water Forum Process. This commitment to a region wide approach to water usage in the Sacramento region and specific activities are discussed in the following paragraphs.

- The District and other water purveyors within Sacramento County and Placer County have participated in several regional water planning activities supported both financially and through active participation by District staff and elected officials.

- The District participated in the planning efforts and is a signatory to the Water Forum Agreement. The Water Forum Agreement was the culmination of an exhaustive effort to resolve water resource planning issues in the greater Sacramento Metropolitan area for the benefit of business, environment, government, and water purveyors. The result of the effort was a landmark agreement stipulating supply criteria for a range of hydrologic events ranging from severe drought to normal supply. The signatories also recognize that any such transfer of water by the District must be in accordance with applicable provisions of federal and state law.

- From the efforts of the purveyors and agencies involved in the Water Forum, the Regional Water Authority and Sacramento Groundwater Authority are moving forward with the Integrated Regional Water Management Plan. The Integrated Regional Water Management Plan intends to provide high-quality and reliable long-term water supplies for the region.

- In 2003, Sacramento Groundwater Authority (SGA) adopted a Groundwater Management Plan. The District participated in the plan. The plan, which covers the groundwater basin in Sacramento County north of the American River, lays out five management objectives for the basin and includes several components aimed at monitoring and managing groundwater quality and levels. The plan also incorporates and reinforces regional objectives included in the Water Forum Agreement.

SPECIFIC RESPONSES TO PETITION FORM

The following Paragraphs contain specific responses to the "Petition for Extension of Time" form, and are listed in the order of the form and numbered accordingly.

4. Extension time period - The District is requesting a 20-year extension, due primarily to the uncertainty associated with the groundwater pollution and planned pump and treat remediation that may have a significant effect over the long term on the District's groundwater supply. Although the Petition form itself references a maximum 10-year extension period, CCR Title 23 section 840-844 does not limit the time to ten years. Given the long-term problem with potential groundwater contamination that may force the District to increase its reliance on Permit 7356, a 20-year extension of time seems entirely appropriate for these circumstances.

5. Water Use – A summary of District annual water production is attached as Exhibit B. The District's water use has been under two different licenses, the above-mentioned permit, and from wells. It has been the District's goal, consistent with the Water Forum Agreement, to be able to meet demand from either source or by managing a combination of the two, and conjunctive use of the system in wet and dry years. Under the District's two appropriative licenses only 15 cfs is available year round, 25 cfs in the summer and fall. (License No. 67

authorizes 15 cfs year round; License No. 2498 authorizes 10 cfs from May to November). Meeting the District's current average daily demand with surface water would require the water under Permit No. 7356; average daily demand has been about 18.1 cfs on an annual basis. However, the highest historic average day demand in any single month was 38.5 cfs (25 mgd) in August 1978. According to the District's 2003-2103 Master Plan, current maximum day demands (corresponding the highest daily water used in a 24 hour period) within the District are about 25.5 mgd, or 39.5 cfs. The maximum average use recorded by the District over a 30-day period was 36.3 cfs and does not reflect the daily diversion requirement of the District to meet the minimum water supply capacity. The 2003-2103 Master Plan estimates current maximum day demand at 39.5 cfs and peak hourly demand at 49.6 cfs (highest 60 minute use period in the year). Based on production records, the District estimates an instantaneous peak demand on groundwater and surface water sources of approximately 50 cfs during the summer months of June (49.2 cfs), July (53.7 cfs) and August (49.6 cfs) 2003.

In the past, the District's water needs have been met with a combination of groundwater pumping and river diversions. However, the groundwater basin has been overdrafted since 1985 and is threatened with water quality problems. The approaching trichloroethylene (TCE) plume and large plume of perchlorate and NDMA believed to have originated on the Aerojet site threaten the District's groundwater supply. Thus, the District needs to have surface supplies ready to replace groundwater supplies should the plumes continue their current movements and contaminate the District's groundwater supply. As discussed earlier, ongoing efforts include installation of monitoring wells and pump and treat remediation to attempt to contain the plume and limit the impact to regional groundwater supplies.

Long-term reliance on groundwater, in the absence of artificial recharge of the groundwater basin with surface water diversions, will exacerbate groundwater conditions associated with the overdraft. Increased pumping lifts increase water cost, and impose greater

risks of water quality problems and equipment failure. Continued reliance on groundwater to serve the District within the Sacramento County's and the District's conjunctive use goal of no more than 40% of demand be met with groundwater if only feasible if the groundwater is suitable for public consumption.

While District demands can be met by both surface and groundwater supplies, the contamination of the District's groundwater supply will force the District to rely more on the surface water rights held by the District. Current and projected water supply requirements (based on maximum month demand) cannot be met with the two existing appropriative licenses alone. Thus, a substantial amount of water under Permit 7356 will be needed. Moreover, because of the District's concerns about undue reliance on groundwater as well as its interest in supporting resolution of regional water problems, the District's goal is to retain its flexibility to use either surface water or groundwater or both, conjunctively. For these reasons, the District believes that an additional extension of time for developing its American River water rights under Permit 7356 is justified and should be granted to December 31, 2025 to allow it the opportunity to utilize its permitted rights once the water quality issues have been resolved.

6. Acres Irrigated – The District currently serves Ancil Hoffman park and golf course for irrigation and domestic water use. The District currently irrigates approximately 146 acres of park land with an estimated demand of 500 acre feet per year. The County has two new regional parks planned that would be served by the District. The parks are approximately 125 and 50 acres in size.

9. Construction Work Completed During Last Extension - The District continues to move forward in its attempts to optimize use of its American River supply. It has commissioned engineering studies, replaced and resized distribution mains, and closely followed and reacted to

the groundwater contamination problem. The largest construction project undertaken since the 1995 extension was granted was the District's membrane filtration treatment plant. The project began in 1995 and was dedicated in August of 2001. The project cost $24.13 Million, and has the capacity to treat 17mgd, but can be expanded to 22 mgd in the future. The project is summarized below.

- Single story residential style building, 68 ft. wide, 270 ft. long, 28 ft. membrane. Building sits over a two million gallon "clearwell" substructure. Initial size sufficient to treat 17 million gallons per day (mgd) with 12 microfiltration units. Facility sized to ultimately treat 22 mgd, with 16 microfiltration units.

- Replaced existing pipelines that connected three Ranney Collectors with 2,200 ft. of 48-inch diameter pipe. Ranney water now flows by gravity to north side of American River. Removed above ground portion of Ranney Collectors to improve American River aesthetics. Removed electrical vault providing power to Ranney 3. Microtunneled beneath the American River to the microfiltration plant site.

- Three microtunnel drives - longest 970 ft. Microtunnel drive beneath the American River - 700 ft. Average depth - 45 ft., ranges from 30 ft. below the American River to 90 ft. entering the 100 ft. deep caisson at the water treatment plant.

- 28 ft. diameter by 60 ft. deep caisson (on south side of American River) near Ranney 2 served as "jacking" shaft for all microtunnel drives. 20 ft. diameter by 100 ft. deep caisson (on north side of American River) at the membrane filtration plant. Two 16 ft. diameter by 45 ft. deep temporary receiving shafts to retrieve microtunneling machine.

- 12 primary membrane skids - 1.8 million hollow fibers per skid. 2 solid membrane skids - 960,000 hollow fibers per skid. 2 tertiary membrane skids - 120,000 hollow fibers per skid. These membrane filters remove particulates 0.2 microns or larger.

In addition to the District's membrane filtration treatment plant, the District continues to undertake other capital improvements. These include the following:

- Water Meter Installation – In March 1997, CWD conducted a water rate structure study to assist the District in revising its flat rates and to address how metered water rates could be instituted in conjunction with a meter implementation program. The water rate structure committee (WRSC) included a mix of participants generally reflective of the District's customer base (i.e.: residential, commercial, schools, parks, Board). The findings regarding implementation of a metering program were unanimous support of water metering for all

District customers; equitable charges for water service; and voluntary residential metering.

As recommended by the WRSC and outlined in the District's Master Plan, the District has taken a systematic approach to District wide metering through phases:

- Phase 1 (COMPLETE) consisted of completion of meter installation and transition to metered billing for commercial, schools, parks and apartments and implementation of the voluntary residential metering program.

- Phase 2 (COMPLETE) includes the completion of meter installation and transition to metered billing for condominiums, duplexes, triplexes, fourplexes, mobile homes and all new construction.

- Phase 3 (COMPLETE) consists of residential metering and billing of all parcels larger than 0.5 acres, all connections larger than 1 inch, extra single family homes and irrigation connections. Completion of Phase 3 will eliminate all flat rates with the exception of single family 1 inch connections on less than 0.5 acres.

- Phase 4 (ONGOING) includes systematic metering through the District for the remaining residential connections under 0.50 acres.

- Current Status of Meter Installation - The meter installation crew consists of two or three field staff installing 75-85 meters per month. The meter crew is currently installing the Phase 4 meters which include the completion of meter installation and transition to metered billing for residential metering of all parcels larger than 0.5 acres, all connections larger than 1 inch, extra single family homes and irrigation connections with metered billing effective July 1, 2007. Phases 4 installation and transition to metered billing will follow starting in July 2006. In the District's recently adopted accelerated program, all customers will be metered by 2012.

- Main Water Line Replacement - In 2002 the District's main line crew started replacing approximately 5,000 feet of new water main each year which includes all appurtenances necessary to upgrade all existing facilities. The projects have been identified in the District's Master Plan based on decision factors which include inadequate fire flow demand, poor water quality and the amount of fails (leaks) per foot of pipe.

- Service Line Replacement - The service line crew consists of three field staff replacing service lines. Approximately 60% of their activity will be planned and the other 40% will be responding to leaks and/or contractor disruptions. The service line crew will replace 220 service lines in a typical year. During the past five years, the District has spent approximately $860,000 on system leak detection, mainline repairs and service line repairs.

11. Construction Completion Date – As discussed in Paragraph 9 above, many aspects of the District's construction projects are ongoing and will continue for some time. The potential expansion of the Water Treatment Plant to 22 mgd is not currently scheduled, but will be scheduled based on demand, planned groundwater well maintenance, groundwater contamination, and other District improvements. The plant footprint is designed to accommodate the expansion with the addition of filter units, pumps and plumbing. Expansion of the plant to serve the District would further reduce dependence on groundwater for peaking and enhance the recovery of the regional groundwater basin from many years of overdraft. Expansion would also reduce the impact on the District if the pollutant plumes remove groundwater wells from service. The additional increment would be used primarily in the summer months when demand exceeds the current 17 mgd plant capacity.

13. Reasons Why Water Use Not Complete – District water supply planning has been based on a reliable groundwater supply used in conjunction with surface water for the greatest benefit of the community. Prior to the detection of groundwater contamination the long range planning indicated that existing District production facilities were sufficient to meet District customer demand and further construction was deferred to a future date.

The Petition for Extension of Time and this supplement have provided numerous reasons why the District should be granted more time for the completion of its full use of water under Permit 7356. Paramount among those reasons is the threat that groundwater pollution will render many of the District's groundwater wells inoperable due to contamination. If this occurs, the District will be forced to rely more on the surface water that can be supplied to the District's customers through Permit 7536. The District needs the ability to use the surface water under that Permit, because the District's other Licenses will not have enough water to make up for the supply lost through contamination of District wells. The District requests time to complete groundwater

pump and treat remediation and reevaluate source supply needed in the future. This important fact needs to be included in the overall analysis, rather than the typical focus on the past use of water by the District. The District strongly believes the groundwater contamination issue alone is enough to justify the State Water Resources Control Board's granting the Petition for Extension of Time for the 20 year period. The additional factors set forth herein (water treatment plant construction, system improvements, District wide metering and planning efforts, both regional and for the District) only add to the compelling reasons to grant the District's petition.

14. Water Conservation – The District has implemented water conservation measures to reduce water demand, a reduction in use which preserves the water right. These water conservation measures were described in the District's 1995 petition. The measures which the District has implemented are anticipated to reduce its water demand by approximately ten percent by the year 2020. The most significant commitment by the District to water conservation is in the Water Forum Agreement in which the District is a signatory. The Water conservation element of the Agreement is essential to meeting both of the co-equal objectives of the Water Forum. The Agreement requires the District and other water purveyors to prepare annual reports on the implementation of their negotiated Water Forum Water Conservation Plans and share these reports with Forum participants. The District's plan includes Best Management Practices that are consistent with the California Urban Water Conservation Councils 14 Best Management Practices. When fully metered, the District will be able to better quantify and evaluate the impacts of its Conservation Plan. The District has reported the following amounts of water conserved over the last three years: 5,744 acre feet (2002), 6,226 acre feet (2003) and 5,713 acre feet (2004).

California Environmental Protection Agency

State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

ENVIRONMENTAL INFORMATION FOR PETITIONS

☐ **Petition for Change** ☑ **Petition for Extension of Time**

Before the State Water Resources Control Board (SWRCB) can approve a petition to change your water right permit or a petition for extension of time to complete use, the SWRCB must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA). This form is not a CEQA document. If a CEQA document has not yet been prepared, a determination must be made of who is responsible for its preparation. As the petitioner, you are responsible for all costs associated with the environmental evaluation and preparation of the required CEQA documents. Please answer the following questions to the best of your ability and submit any studies that have been conducted regarding the environmental evaluation of your project. If you need more space to completely answer the questions, please number and attach additional sheets.

1. DESCRIPTION OF PROPOSED CHANGES OR WORK REMAINING TO BE COMPLETED

For a petition to change, provide a description of the proposed changes to your project including, but not limited to, type of construction activity, structures existing or to be built, area to be graded or excavated, increase in water diversion and use (up to the amount authorized by the permit), changes in land use, and project operational changes, including changes in how the water will be used. For a petition for extension of time, provide a description of what work has been completed and what remains to be done. Include in your description any of the above elements that will occur during the requested extension period.

☑ *See Attachment No.* 1

2. COUNTY PERMITS

a. Contact your county planning or public works department and provide the following information:

Person contacted: N/A Date of contact: _____

Department: _____ Telephone: (_____) _____

County Zoning Designation: _____

Are any county permits required for your project? ☐ YES ☑ NO If YES, check appropriate box below:
☐ Grading permit ☐ Use permit ☐ Watercourse ☐ Obstruction permit ☐ Change of zoning
☐ General plan change ☐ Other (explain):

_____

_____

b. Have you obtained any of the required permits described above? ☐ YES ☐ NO
If YES, provide a complete copy of each permit obtained.
☐ *See Attachment No.* ___

3. STATE/FEDERAL PERMITS AND REQUIREMENTS

a. Check any additional state or federal permits required for your project:
☐ Federal Energy Regulatory Commission ☐ U.S. Forest Service ☐ Bureau of Land Management
☐ Soil Conservation Service ☐ Dept. of Water Resources (Div. of Safety of Dams) ☐ Reclamation Board
☐ Coastal Commission ☐ State Lands Commission ☐ Other (specify) _____

b. For each agency from which a permit is required, provide the following information:

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.

☐ *See Attachment No.* ___

c. Does your proposed project involve any construction or grading-related activity that has significantly altered or would significantly alter the bed or bank of any stream or lake? ☐ YES ☑ NO
If YES, explain: _____

_____

_____

_____

_____

_____

_____

_____

_____

☐ *See Attachment No.* ___

d. Have you contacted the California Department of Fish and Game concerning your project? ☐ YES ☑ NO
If YES, name and telephone number of contact: Forwarding Petition and Env. form to DFG simultaneously.

4. ENVIRONMENTAL DOCUMENTS

a. Has any California public agency prepared an environmental document for your project? ☐ YES ☑ NO
If YES, submit a copy of the latest environmental document(s) prepared, including a copy of the notice of determination adopted by the California public agency. Public agency: _____

b. If NO, check the appropriate box and explain below, if necessary:
- ☑ The petitioner is a California public agency and will be preparing the environmental document.*
- ☐ I expect that the SWRCB will be preparing the environmental document.**
- ☐ I expect that a California public agency other than the State Water Resources Control Board will be preparing the environmental document.* Public agency: _____

☐ *See Attachment No.* ___

* Note: When completed, submit a copy of the final environmental document (including notice of determination) or notice of exemption to the SWRCB, Division of Water Rights. Processing of your petition cannot proceed until these documents are submitted.

** Note: CEQA requires that the SWRCB, as Lead Agency, prepare the environmental document. The information contained in the environmental document must be developed by the petitioner and at the petitioner's expense under the direction of the SWRCB, Division of Water Rights.

5. WASTE/WASTEWATER

a. Will your project, during construction or operation, (1) generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or (2) cause erosion, turbidity or sedimentation?
☑ YES ☐ NO
If YES, or you are unsure of your answer, explain below and contact your local Regional Water Quality Control Board for the following information (See instruction booklet for address and telephone no.):
Solid waste is generated during the water treatment process.

☐ *See Attachment No.* ___

b. Will a waste discharge permit be required for your project? ☐ YES ☑ NO

Person contacted: Alex MacDonald Date of contact: 1/17/06

c. What method of treatment and disposal will be used? _____

Solid waste generated during the water treatment process is professionally removed from the water treatment facility for disposal. No sewer discharges or discharges to surface water occur.

☐ *See Attachment No.* ___

6. ARCHEOLOGY

a. Have any archeological reports been prepared on this project? ☐ YES ☑ NO
b. Will you be preparing an archeological report to satisfy another public agency? ☐ YES ☑ NO
c. Do you know of any archeological or historic sites located within the general project area? ☐ YES ☑ NO

If YES, explain: _____

☐ *See Attachment No.* ___

7. ENVIRONMENTAL SETTING

Attach **three complete sets of color photographs**, clearly dated and labeled, showing the vegetation that exists at the below-listed three locations. For time extension petitions, the photographs should document only those areas of the project that will be impacted during the requested extension period.

- ☑ Along the stream channel immediately downstream from the proposed point(s) of diversion.
- ☑ Along the stream channel immediately upstream from the proposed point(s) of diversion.
- ☑ At the place(s) where the water is to be used.

8. CERTIFICATION

I hereby certify that the statements I have furnished above and in the attachments are complete to the best of my ability and that the facts, statements, and information presented are true and correct to the best of my knowledge.

Date: 1/19/06 Signature: Steve M. Voight

ENVIRONMENTAL INFORMATION FOR PETITIONS

PETITION FOR EXTENSION OF TIME FOR WATER RIGHTS APPLICATION 12637, PERMIT 7356

ATTACHMENT 1

1. Description of Proposed Changes or Work Remaining to be Completed

The Carmichael Water District (District) is requesting a 20-year time extension to December 31, 2025, to complete beneficial use of water under Permit No. 7356. Historically, the District's water use has been under two appropriative licenses, Permit No. 7356, and from wells. Recently discovered groundwater contamination threatens the District's groundwater supply and planned development of groundwater resources. This contamination will likely force the District to shift to more surface water use over the next 20 years and will result in the District more fully utilizing its surface water allocation under Permit 7356 than it currently uses.

Under the District's two licenses only 15 cubic feet per second (cfs) is available year round, 25 cfs in the summer and fall. License No. 67 authorizes 15 cfs year round and License No. 2498 authorizes 10 cfs from May to November. Meeting the District's current average daily demand with surface water would require the water under Permit No. 7356; average daily demand has been about 18.1 cfs on an annual basis. However, the highest historic average day demand in any single month was 38.5 cfs in August 1978. The District's 2003-2103 Master Plan estimates current maximum day demand (corresponding to the highest daily water used in a 24 hour period) at 39.5 cfs and peak hourly demand (highest 60 minute use period in the year) at 49.6 cfs. The maximum average use recorded by the District over a 30-day period was 36.3 cfs and does not reflect the daily diversion requirement of the District to meet the minimum water supply capacity. Based on production records, the District estimates an instantaneous peak demand on groundwater and surface water sources of approximately 50 cfs during the summer months of June (49.2 cfs), July (53.7 cfs) and August (49.6 cfs) 2003.

Work completed during the last extension includes the construction of the District's membrane filtration treatment plant, completion of engineering studies, replacement and resizing of distribution mains, and tracking and reacting to the groundwater contamination problem. Ongoing capital improvement projects include water meter installation and main water line and service water line replacement. The water treatment plant has a capacity of 17 million gallons per day (mgd), which may be expanded to a 22 mgd capacity under the Petition for Extension of Time, based on demand. The treatment plant footprint is designed to accommodate the expansion with the addition of internal filtration units, pumps, and plumbing. No additional structures would be built, and no changes to the diversion structures or supply lines from the points of diversion would be required under the subject petition.

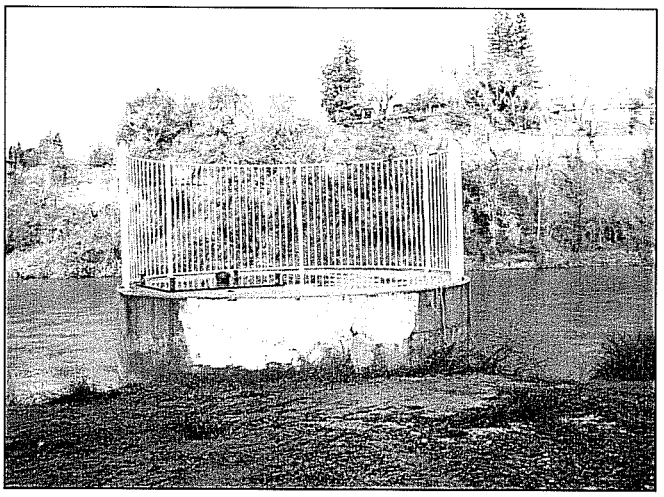


PHOTO 1: Ranney Collector 1.

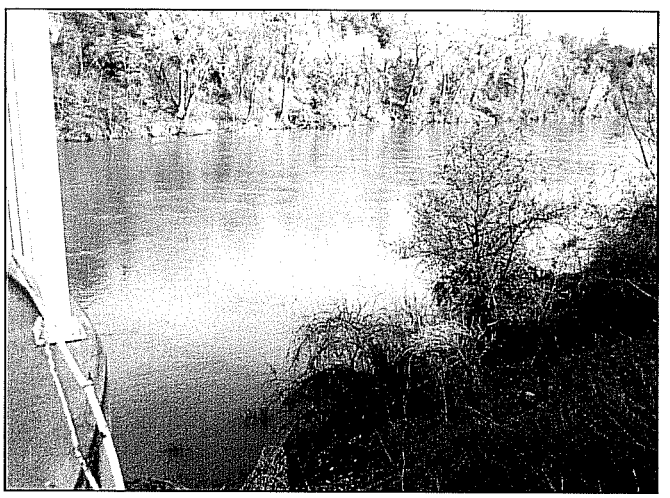


PHOTO 2: Stream Channel Immediately Upstream of Ranney Collector 1.

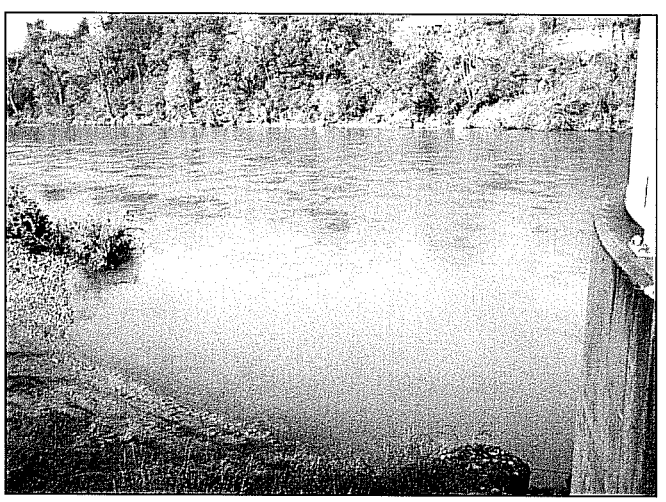


PHOTO 3: Stream Channel Immediately Downstream of Ranney Collector 1.

SOURCE: Photographs, 1/18/2006; AES, 2006

Figure 1
Color Photographs - Ranney Collector 1

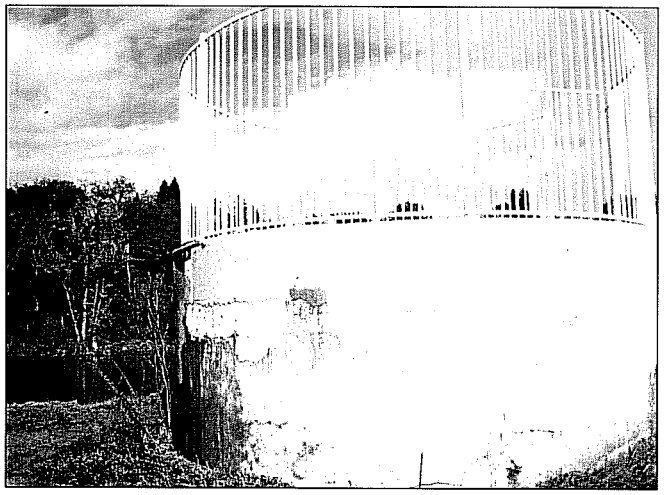


PHOTO 1: Ranney Collector 2.

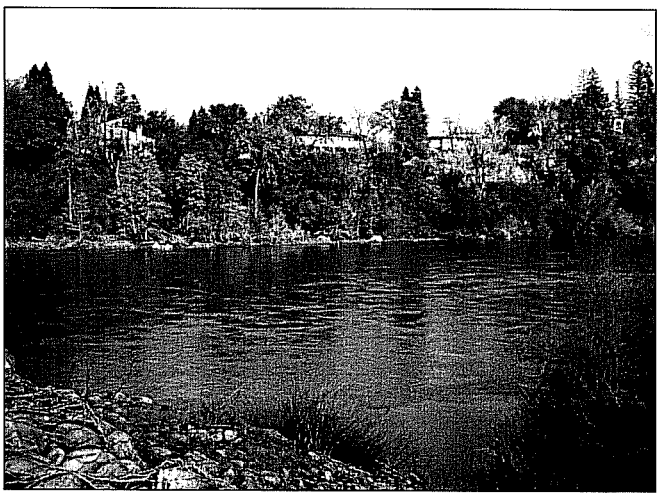


PHOTO 2: Stream Channel Immediately Upstream of Ranney Collector 2.

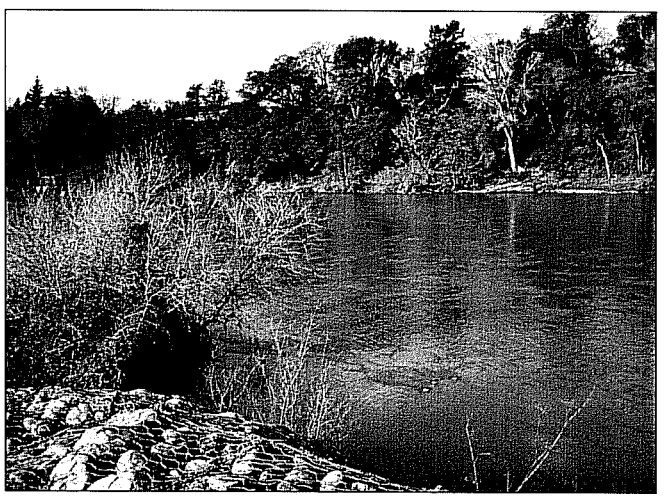


PHOTO 3: Stream Channel Immediately Downstream of Ranney Collector 2.

SOURCE: Photographs, 1/18/2006; AES, 2006

Figure 2
Color Photographs - Ranney Collector 2

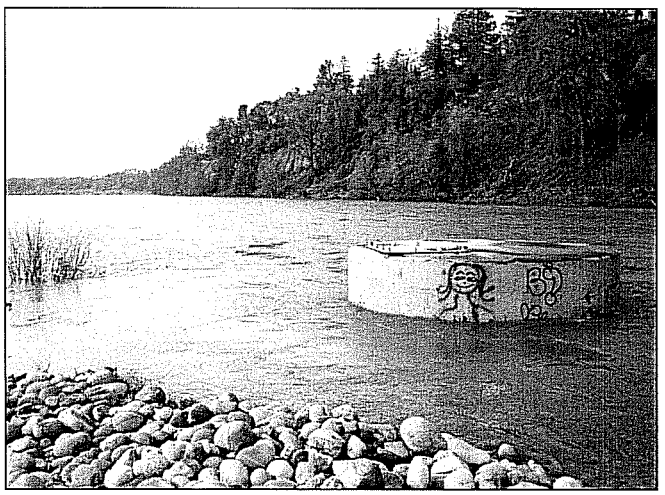


PHOTO 1: Ranney Collector 3.

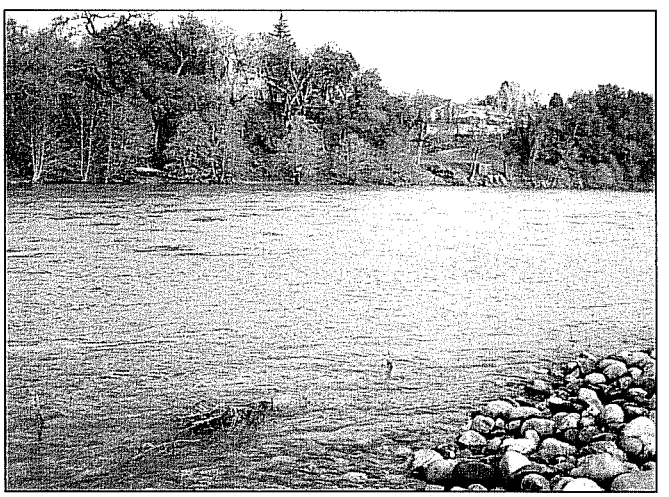


PHOTO 2: Stream Channel Immediately Upstream of Ranney Collector 3.

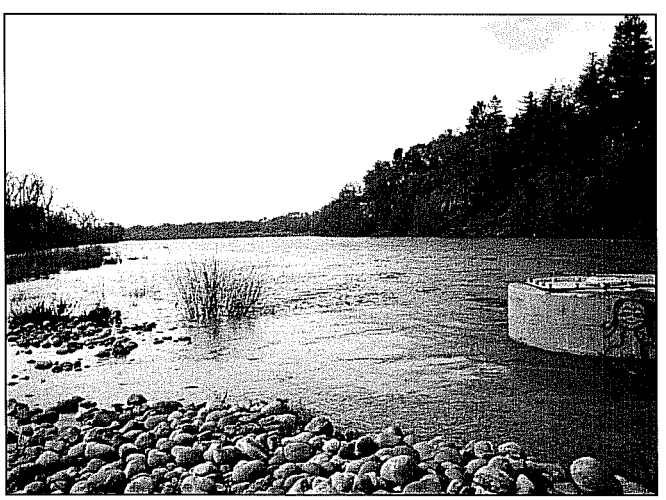
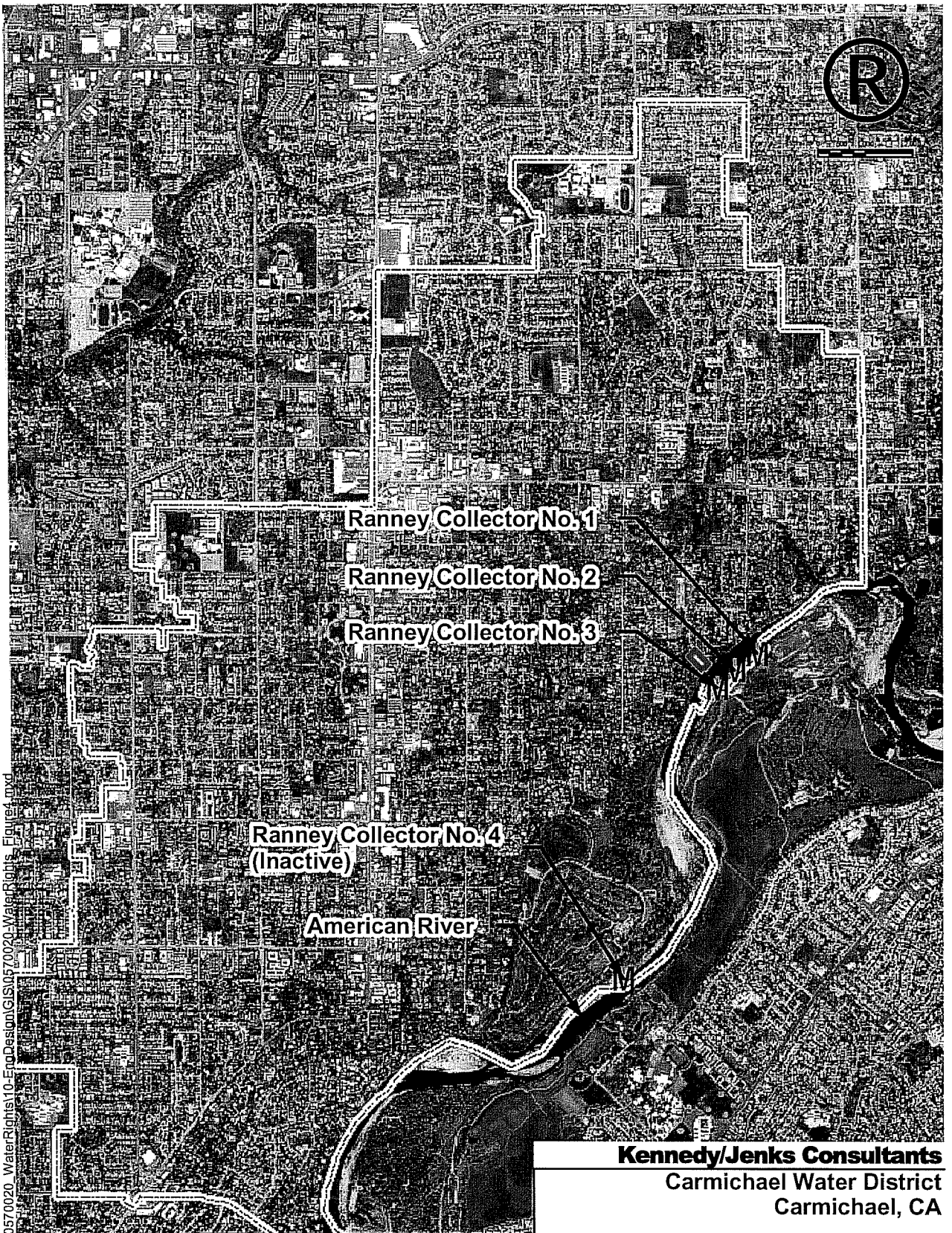


PHOTO 3: Stream Channel Immediately Downstream of Ranney Collector 3.

SOURCE: Photographs, 1/18/2006; AES, 2006

Figure 3
Color Photographs - Ranney Collector 3



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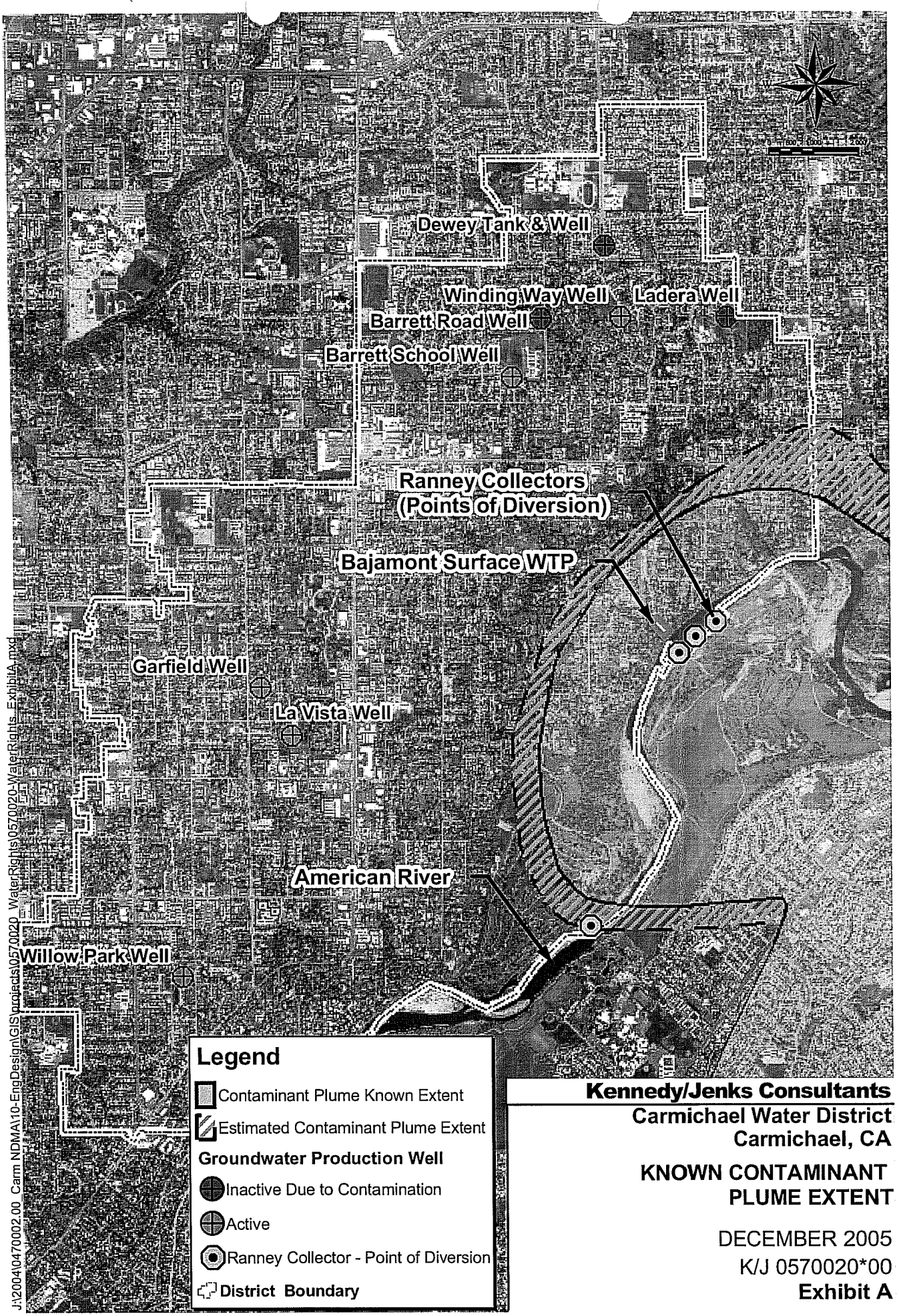
Kennedy/Jenks Consultants

Carmichael Water District
Carmichael, CA

DISTRICT BOUNDARY
(PLACE OF USE)

JANUARY 2006
K/J 0570020*00
Figure 4



Kennedy/Jenks Consultants

Carmichael Water District
Carmichael, CA

KNOWN CONTAMINANT PLUME EXTENT

DECEMBER 2005
K/J 0570020*00
Exhibit A

CARMICHAEL WATER DISTRICT
1970-2004 ANNUAL WATER PRODUCTION (a)

Year	Surface Water Production (b)		Groundwater Production		Total Yearly Water Production	
	(AFY)	% of Total	(AFY)	% of Total	(AFY)	Average Daily Demand (MGD)
1970	10,715	77.7	3,074	22.3	13,789	12.3
1971	10,738	77.7	3,074	22.3	13,812	12.3
1972	10,339	72.7	3,887	27.3	14,226	12.7
1973	11,011	78.3	3,051	21.7	14,062	12.6
1974	12,111	87.1	1,793	12.9	13,904	12.4
1975	11,430	88.4	1,501	11.6	12,931	11.5
1976	12,354	86.5	1,933	13.5	14,287	12.8
1977	9,710	85.3	1,670	14.7	11,380	10.2
1978	10,873	84.0	2,076	16.0	12,949	11.6
1979	10,988	84.1	2,076	15.9	13,064	11.7
1980	11,538	86.6	1,792	13.4	13,330	11.9
1981	11,067	85.1	1,943	14.9	13,010	11.6
1982	9,711	74.9	3,256	25.1	12,967	11.6
1983	9,569	74.0	3,364	26.0	12,933	11.5
1984	11,536	77.1	3,435	22.9	14,971	13.4
1985	10,147	70.9	4,169	29.1	14,316	12.8
1986	6,510	53.1	5,752	46.9	12,262	10.9
1987	9,983	69.9	4,301	30.1	14,284	12.8
1988	8,690	67.8	4,130	32.2	12,820	11.4
1989	8,797	68.1	4,126	31.9	12,923	11.5
1990	7,665	59.6	5,197	40.4	12,862	11.5
1991	6,176	52.9	5,506	47.1	11,682	10.4
1992	7,132	57.0	5,370	43.0	12,502	11.2
1993	7,385	59.7	4,980	40.3	12,365	11.0
1994	5,200	39.5	7,964	60.5	13,164	11.8
1995	8,623	67.1	4,236	32.9	12,859	11.5
1996	7,063	52.1	6,482	47.9	13,545	12.1
1997	8,866	65.0	4,780	35.0	13,646	12.2
1998	7,255	60.4	4,752	39.6	12,007	10.7
1999	7,697	64.3	4,265	35.7	11,962	10.7
2000	7,376	57.4	5,467	42.6	12,843	11.5
2001	5,985	47.0	6,752	53.0	12,737	11.4
2002	8,507	69.2	3,778	30.8	12,285	11.0
2003	9,308	74.0	3,269	26.0	12,577	11.2
2004	9,842	72.0	3,836	28.0	13,678	12.2
35-Year Average	**9,197**	**69.9**	**3,915**	**30.1**	**13,112**	**11.7 (=18.1 cfs)**

(a) From Carmichael Water District Water Production Records. Production is assumed equal to demand.
(b) For Ranney Collectors 1, 2, and 3