

## State of California – Health and Human Services Agency Department of Health Services



### Division of Drinking Water and Environmental Management Ranking Criteria for Projects

Proposition 50: Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Water Code Section 79500 et seq.)

## **Chapter 3 - Water Security Chapter 4 - Safe Drinking Water**

#### **Background**

Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, (Water Code Section 79500, et seq.) was passed by the voters of California in the general election of November 5, 2002.

The Department of Health Services (DHS) is responsible for implementing Water Code Section 79520 (Chapter 3 - Water Security) and Water Code Section 79530 (Chapter 4 - Safe Drinking Water).

Some aspects of Chapters 3 and 4 were subsequently clarified by Assembly Bill (AB) 1747, and Senate Bill (SB) 1049. AB 1747 includes the following requirements:

- Water Code Section 79505.6 requires the development of funding guidelines by March 15, 2004, after solicitation of public comments and two public meetings. That same section exempts disadvantaged communities from any requirements for matching funds.
- Water Code Section 79506.7 requires technical assistance to be provided to disadvantaged communities.
- Water Code Section 79522 requires funding to be provided to DHS for the implementation of Water Code Section 79520 (Chapter 3 - Water Security) and sets forth requirements for DHS to consult with security agencies and water systems in the development of criteria.
- Water Code Section 79532 identifies Southern California agencies and other aspects of projects (including contaminants of concern) associated with Water Code Section 79530 (b) – (Chapter 4 - Safe Drinking Water) – Colorado River use reduction.
- Water Code Section 79534 guides the implementation of Water Code Section 79530 (a) – (Chapter 4 - Safe Drinking Water) – five categories of grants that address drinking water contaminants.

#### **Development of Project Ranking Criteria**

To address the requirements of Proposition 50 and AB 1747, DHS drafted criteria for the ranking of projects, and posted on the DHS website draft proposed general criteria and specific criteria for Chapters 3 and 4 in October 2003. DHS also provided the draft criteria to public water systems through mailings.

DHS invited public comment to be submitted by January 20, 2004, and revised the draft criteria in response to submitted comments.

DHS held two public meetings, as required by statute, to present and receive input on the revised draft criteria. These were held on February 24 in Sacramento and on February 26 in Los Angeles. DHS invited public comments to be submitted until March 4, 2004. These comments were considered in developing the final criteria. The criteria are to be submitted to the Legislature by March 15, 2004.

The Project Ranking Criteria, which follow, incorporate the comments from the two public meetings.

#### **Project Ranking Criteria**

#### <u>Process</u>

- 1. DHS reserves the right to modify these criteria, in consultation with appropriate stakeholder groups, as necessary to effectively implement this program. The criteria in effect when an applicant is invited to submit a full application will continue to apply to that project.
- 2. After the ranking criteria are available in final form, invitations will be sent to all public water systems to submit a pre-application for each project. The pre-applications are to identify the grant program(s) for which the applicant is applying. The invitations to apply will include a deadline for submission of pre-applications.
  - DHS reserves the right to establish such deadlines for each round of invitations and for each type of pre-application.
  - Pre-applications not timely submitted will not be considered or ranked.
- 3. Based on the information submitted, the projects will be ranked according to the criteria for each separate grant program(s). A separate ranking list will be established for each grant program.
- 4. The draft ranking lists will be subject to review by a stakeholders' group and then released for public comment before they are made final. Once the lists are in final form, grant application forms will be sent to applicants whose projects rank highest down through those projects representing the total amount of available funding. The grant application forms will include a deadline for submission of a

- complete application. DHS reserves the right to establish such deadlines for each round of applications and for each type of application. Applications not timely completed and submitted will not be considered for funding.
- 5. After an application is deemed complete, DHS will issue a letter of commitment to the applicant with a list of conditions to be met before issuing of a funding agreement. Commitment letters will include a deadline for meeting all such conditions. These conditions include completion of California Environmental Quality Act (CEQA) compliance and submittal of final project plans and specifications. Upon the applicant's timely compliance with all conditions, the project will be reviewed and, if satisfactory, a funding agreement will be executed. Failure of the applicant to satisfy all conditions of funding by the deadlines established in its commitment letter may result in loss of funding.
- 6. Twenty-five percent of the program grant funds in Chapters 3 and 4 will be allocated to disadvantaged communities.

#### Definitions

- 1. "Community water system" is defined pursuant to Health and Safety (H&S) Code Section 116275(i) as a public water system that serves at least 15 service connections used by year-long residents or regularly serves at least 25 year-long residents of the area served by the water system.
- 2. "Disadvantaged community" means a community with an annual household income that is less than 80 percent of the statewide annual median household income.
- 3. "Matching funds" means funds made available by nonstate sources, which may include, but are not limited to, donated services from nonstate sources. Matching funds for state agencies may include state funds and services except for Proposition 50 funds.
- 4. "Noncommunity water system" is defined pursuant to H&S Code Section 116275(j) as a public water system that is not a community water system.
- 5. "Nontransient noncommunity water system" is defined pursuant to H&S Code Section 116275(k) as a public water system that is not a community water system and that regularly serves at least 25 of the same persons over six months per year.
- 6. "Public water system" is defined pursuant to H&S Code Section 116275(h) as a system for the provision of water that has 15 or more service connections or regularly serves at least 25 individuals at least 60 days out of the year.
- 7. "Small water system" is defined as a public water system serving less than or equal to 1,000 service connections or less than or equal to 3,300 population.

8. Local Primacy Agency (LPA) is defined pursuant to H&S Code Section 116275(r) as any local health officer that has applied for and received primacy delegation from DHS pursuant to H&S Code Section 116330.

#### General Criteria

- 1. Proposition 50 grant funds cannot be used for operation and maintenance activities.
- 2. Applicants cannot receive funds for the same project from other Proposition 50 grant programs.
- 3. Applicants may be reimbursed for expenses determined to be eligible by DHS. Preliminary costs incurred by the applicant after DHS grant criteria are adopted may be eligible for reimbursement. Preliminary costs may include planning, preliminary engineering, design, environmental documentation, and interim financing. Construction costs, in order to be eligible, must have been incurred after the applicant receives a letter of commitment from DHS. Actual reimbursement will occur only after the funding agreement is executed.
- 4. If an applicant is required to prepare an Urban Water Management Plan pursuant to California Water Code Section 10610 et seq., a copy of the plan shall be submitted to DHS prior to executing a funding agreement.
- 5. Eligible project costs are limited to facilities sized to serve no more than the 20-year demand projected in an Urban Water Management Plan or the 20-year demand projected in a comparable public water system planning document. If an applicant does not have an Urban Water Management Plan or comparable document, the eligible project costs are limited to facilities sized to serve no more than ten percent above existing water demand at peak flow.
- 6. Matching funds are required on a one-to-one basis except for disadvantaged communities and small water systems.
- 7. Water system expenses incurred prior to the funding agreement award may be used as matching funds. Funds expended prior to October 28, 2003, do not qualify as matching funds.
- 8. Grants to privately owned water systems that are regulated by the California Public Utilities Commission (PUC) will be subject to the PUC's review and approval and the PUC's directives and/or general order(s) addressing the water system's use of Proposition 50 funds. Any privately owned water system receiving funding will be prohibited from earning a profit from the use of these funds and achieving financial benefit from the later disposition of assets purchased by these funds regardless of whether or not said assets are a useful part of the water system.

- For privately owned public water systems that are not regulated by the PUC, DHS will institute comparable controls and requirements on the use of Proposition 50 funds with regard to assets and return of profit.
- Construction of the project must start within one year after funding agreement execution, including CEQA compliance. The project shall conclude within three years after funding agreement execution. Requests for time extensions will be considered.
- 11. A review of the cost effectiveness of the project will be part of the approval process.
- 12. Public water systems under the regulatory jurisdiction of DHS include public water systems regulated by LPAs.

#### **Disadvantaged Communities**

- 1. Twenty-five percent of the funds in Chapters 3 and 4 will be allocated to disadvantaged communities.
- 2. In order to be eligible for funds set aside for disadvantaged communities, an applicant must be:
  - (a) A public water system whose entire service area meets the definition of a disadvantaged community, OR
  - (b) A public water system applying for a project to physically connect and incorporate by consolidation a separate existing public water system whose entire service area meets the definition of a disadvantaged community, OR
  - (c) A public water system applying on behalf of a community that is part of the public water system's service area, where each census tract in that part of the service area is identified in the project and meets the definition of a disadvantaged community.
- 3. In order to be eligible for funds set aside for disadvantaged communities, the project must benefit only the disadvantaged community identified in the application.
- 4. DHS will create separate Project Priority Lists for disadvantaged communities for each grant program that has a set aside for disadvantaged communities. Projects on those lists will be prioritized based on: 1) the criteria of each grant program; 2) disadvantaged community bonus points for median household income and consolidation; 3) type of water system (community systems are ranked higher than nontransient noncommunity water systems, and nontransient noncommunity water systems); and 4) by population with larger populations ranked higher.

5. Projects for disadvantaged communities will be awarded bonus points for median household income as follows:

Median Household Income (MHI) Bonus Points				
MHI of Community	Bonus Points			
> 80% of statewide MHI	not eligible			
= 80% of statewide MHI	0			
60% - 79% of statewide MHI	5			
40% - 59% of statewide MHI	10			
20% - 39% of statewide MHI	15			
< 20% of statewide MHI	20			

Median household income (MHI) values will be determined for each community seeking the set aside for disadvantaged communities. MHI values will be truncated to the next whole percent (e.g., 79.851percent will be truncated to 79 percent).

- 6. Projects for disadvantaged communities that include the physical consolidation of two or more public water systems will be awarded ten bonus points.
- 7. Disadvantaged communities are not required to provide matching funds.

#### **Chapter 3: Water Security (\$50 Million)**

These funds may be used for monitoring and early warning systems, fencing, protective structures, contamination treatment facilities, emergency interconnections, communications systems, and other projects designed to prevent damage to water treatment, distribution, and supply facilities, to prevent disruption of drinking water deliveries, and to protect drinking water supplies from intentional contamination.

#### **General Criteria and Information**

- 1. Eligible applicants are public water systems under the regulatory jurisdiction of DHS.
- 2. The minimum grant for a project is \$50,000.
- 3. The maximum grant for a project is \$10 million.
- 4. Twenty-five percent of the funds will be allocated to disadvantaged communities.
- 5. New monitoring or early warning technologies may be proposed as eligible items, but will be evaluated by DHS for accuracy and precision.
- 6. Grants cannot be used to supplant funding for the routine responsibilities or obligations of any state, local, or regional drinking water system (Water Code Section 79522(d)). Grant funds cannot be used for projects previously required by a DHS compliance order, permit condition, or regulation.
- 7. Community water systems that serve over 1,000 service connections or 3,300 population are required to complete and submit to U.S. Environmental Protection Agency (EPA) a Security Vulnerability Assessment, and to certify to EPA that an updated Emergency Response Plan has been completed, before execution of the funding agreement. All other public water systems are exempt from this requirement.
- 8. All public water systems are required to submit an updated Emergency Response Plan and Emergency Notification Plan (required by California H&S Code Section 116460) to the appropriate DHS district office or LPA before execution of the funding agreement.
- 9. Projects will be ranked by bonus points, then by population. Projects with the highest number of bonus points will be ranked first. Projects with the same number of bonus points will be ranked by population with the applicant that serves the largest population first.

The population that will be used for ranking purposes will be the number of people benefiting from the project. Population for purposes of this grant program includes transient or seasonal populations.

- 10. One bonus point will be assigned for each emergency intertie. Up to five bonus points can be assigned to projects consisting of emergency interties. Bonus points will only be assigned if the intertie(s) will supply at least 25 percent of the water demand for one of the recipient water systems or at least ten million gallons per day.
- 11. Five bonus points will be assigned to projects that benefit at least five other public water systems (e.g., security measures on a large reservoir that serves multiple systems).

#### Chapter 4: Safe Drinking Water (\$435 Million)

Chapter 4 includes funding for the following:

#### Infrastructure Grant Program #1 [Section 79530(a)(1)]:

Grants to small community water systems (SCWS) (less than or equal to 1,000 service connections or less than or equal to 3,300 persons) to upgrade monitoring, treatment, or distribution infrastructure.

#### Infrastructure Grant Program #2 [Section 79530(a)(2)]:

Grants to finance development and demonstration of new treatment and related facilities for water contaminant removal and treatment.

#### Infrastructure Grant Program #3 [Section 79530(a)(3)]:

Grants for community water system water quality monitoring facilities and equipment.

#### Infrastructure Grant Program #4 [Section 79530(a)(4)]:

Grants for drinking water source protection.

#### Infrastructure Grant Program #5 [Section 79530(a)(5)]:

Grants for treatment facilities necessary to meet disinfection byproduct (DBP) safe drinking water standards.

Total funding for Infrastructure Grant Programs #1 – 5: \$70 million

**Drinking Water State Revolving Fund** (DWSRF) [Section 79530(a)(6)]: DWSRF is an established program and is administered separately from the new grant programs addressed by the ranking criteria proposed in this document. (\$90 million)

#### **Southern California Projects** [Section 79530(b)]:

Grants to Southern California water agencies to assist in meeting the State's commitment to reduce Colorado River water use to 4.4 million acre-feet (MAF) per year. (\$260 million)

Water Code Section 79532 and Section 79534 (AB 1747) require that priority be given to projects that reduce public and environmental exposure to contaminants that pose the most significant health risks, and that will bring water systems into compliance with safe drinking water standards (maximum contaminant levels (MCLs)). These include, but are not limited to, projects that address public exposure to contaminants for which safe drinking water standards have been established including arsenic, DBPs, and uranium. Projects to address emerging contaminants, including perchlorate, chromium-6, and endocrine disrupters, shall also be given priority.

#### Chapter 4 Section 79530 (a)(1) - (5): Infrastructure Grants

#### **General Criteria and Information**

- 1. The \$70 million will be evenly split among these five grant programs.
- 2. Twenty-five percent of the funds will be allocated to disadvantaged communities.
- 3. Recipients of the grants must meet technical, managerial, and financial capacity requirements.
- 4. If a project is eligible for the grants addressing the Colorado River 4.4 MAF requirement (Water Code Section 79530(b)), the project is not eligible for funding under this subparagraph.
- 5. If there are not enough projects to use all of the funds in a grant program, the uncommitted funds in that grant program may be redistributed to the other grant programs.

#### SPECIFIC CRITERIA FOR INFRASTRUCTURE GRANT PROGRAMS #1 - 5

**Infrastructure Grant Program #1:** Grants to small community water systems to upgrade monitoring, treatment, or distribution infrastructure.

- 1. Eligible applicants are small community public water systems (less than or equal to 1,000 service connections or less than or equal to 3,300 persons) under the regulatory jurisdiction DHS.
- 2. The minimum grant for a project is \$5,000.
- 3. The maximum grant for a project is \$2 million.
- 4. The water system must be in noncompliance with a safe drinking water standard.
- 5. The DWSRF categories (Attachment A) will be used to rank projects.
- 6. Within a category, projects will be ranked by water system population, with the largest population ranked first.

**Infrastructure Grant Program #2:** Grants to finance development and demonstration of new treatment and related facilities for water contaminant removal and treatment.

- 1. Eligible applicants are public water systems under the regulatory jurisdiction of DHS.
- 2. The minimum grant for a project is \$50,000.
- 3. The maximum grant for a project is \$2 million.

- 4. The Proposition 50/AB 1747 categories (Attachment B) will be used to rank projects. Within a category, projects that address removal and treatment of multiple contaminants in that category will be ranked higher than projects that address removal and treatment of only a single contaminant. For example, treatment for arsenic and uranium would rank higher than treatment for arsenic or uranium.
- 5. After the ranking described in Section 4, projects will be further ranked according to type of study. Demonstration projects will be ranked higher than pilot studies, pilot studies will be ranked higher than bench-scale studies. Applied research projects will be ranked higher than basic research projects.
- 6. DHS will use a peer review panel to determine the final priority list.
- 7. Pre-applications must include the following information or describe how the following will be addressed in the study to the extent they are relevant to the proposed study:
  - a. Qualifications of project proponents to undertake such a study.
  - b. How the proposed study involves new treatment technology for the contaminants(s) being treated. It should not involve treatment technology that has already been accepted by DHS for the contaminants(s) being treated.
  - c. The data collection and study protocol must be based on generally accepted scientific principles.
  - d. The study must address ongoing operation and maintenance issues.
  - e. The study must involve a public purpose that is of statewide interest and concern.
  - f. The study must include a peer review component. A water system representative from another water system must be a member of the peer review group.
  - g. The study must include a plan for public dissemination of the results, including submission of a report to DHS, within one year of project completion.
  - h. The study must address affordability and level of operational expertise required to operate the treatment facility.
  - i. The study must address handling and disposal of residuals (e.g., waste products of the treatment process), if any are present or will be created.
  - j. Demonstration projects must include preparation of an operations and maintenance manual.
- 8. Projects dealing with MTBE or other oxygenates shall be referred to the Drinking Water Treatment and Research Fund, to the extent that funds in that program are available for research.

9. All intellectual property developed pursuant to this grant program, including but not limited to copyrights, patents, and licenses, shall be the property of the State of California and shall remain in the public domain.

**Infrastructure Grant Program #3:** Grants for community water system water quality monitoring facilities and equipment.

- 1. Eligible applicants are community public water systems under the regulatory jurisdiction of DHS.
- 2. The minimum grant for a project is \$5,000.
- 3. The maximum grant for a project is \$2 million.
- 4. The water system must be in noncompliance with a safe drinking water standard.
- 5. The Proposition 50/AB 1747 categories (Attachment B) will be used to rank projects.
- 6. Within a category, projects will be ranked by water system population, with the largest population ranked first.

**Infrastructure Grant Program #4:** Grants for drinking water source protection.

- 1. Eligible applicants are public water systems under the regulatory jurisdiction of DHS.
- 2. The minimum grant for a project is \$50,000.
- 3. The maximum grant for a project is \$2 million.
- 4. Source Water Protection (SWP) grant funds may be used for planning, preliminary engineering, detailed design, construction, education, land acquisition, conservation easements, equipment purchase, and implementing the elements of a SWP program.
- 5. The intent of SWP projects is to prevent the water supply from becoming contaminated.
  - SWP funds should be used to fund projects that prevent a Possible Contaminating Activity (PCA) from releasing contaminants, or to prevent contaminants that have been released from reaching the water supply.
- 6. SWP funds may not be used to clean up contamination, construct new sources, install treatment on existing sources, or to reconstruct or modify existing sources.

- 7. The SWP Proposition 50 categories (Attachment C) will be used to rank projects.
- 8. Bonus points will be assigned to projects as follows: four bonus points will be assigned if the contamination from PCAs that the project proposes to address has been released and the direction of movement is toward the drinking water source. Two bonus points will be assigned if a local task force or work group has been organized to develop and carry out a SWP program. Two bonus points will be assigned if a written SWP program has been developed that identifies possible management measures. Bonus points will be assigned to projects that address a water supply (i.e., reservoir, aquifer, or river) that is used by multiple water systems: one bonus point will be assigned for each additional public water system participating in the SWP project, up to a maximum of three points.
- 9. Within a category, projects will be ranked by bonus points (highest first), then by system type (community water systems before nontransient noncommunity water systems), then by water system population with the largest population first.

**Infrastructure Grant Program #5:** Grants for treatment facilities necessary to meet DBP safe drinking water standards.

- 1. Eligible applicants are public water systems under the regulatory jurisdiction of DHS.
- 2. The minimum grant for a project is \$50,000.
- 3. The maximum grant for a project is \$2 million.
- 4. The water system must be in non-compliance with the EPA Stage 1 DBP Rule MCLs or treatment technique. The project must follow all appropriate guidance for pathogen control. If the project is receiving funds under Chapter 6, it is not eligible under this chapter.
- 5. A theoretical cancer risk from regulated DBPs will be used as means of ranking projects. A risk will be calculated, based on the concentrations of regulated DBPs in the water system. In order to expedite consideration of projects and funding under this grant program, the applicant is responsible for:
  - a. Determining the average concentrations of the individual regulated DBPs, and providing the data used to make those determinations.
    - For water systems serving less than 10,000 people, all available data should be used to determine the average concentration of individual regulated DBPs.
    - ii) For those water systems serving 10,000 or more people, the last five years of quarterly data should be used to determine the average concentration of individual regulated DBPs.

- b. Calculating the theoretical cancer risk, based upon the average regulated DBP concentrations and cancer risk coefficients, using the table provided by DHS (Attachment D).
- 6. Projects that address DBP MCL violations will be ranked higher than projects where no DBP MCL violation has occurred. Projects will then be ranked by theoretical cancer risk as described in Section 5 with the highest risk ranked first.
- 7. In the event of a tie between projects, the projects will then be ranked by calculated cancer risk times the population served, with the higher values ranked first.

#### Chapter 4 Section 79530(b): Southern California Projects

Eligible projects must assist grantee in meeting drinking water standards and in meeting the state's commitment to reduce Colorado River water use to 4.4 MAF per year. Eligible projects must be for Southern California water agencies whose service area is entirely or partly in San Diego, Imperial, Riverside, Orange, Los Angeles, San Bernardino, Santa Barbara, or Ventura Counties.

#### General Criteria and Information:

- 1. Eligible applicants are public water systems under the regulatory jurisdiction of DHS.
- 2. The minimum grant for a project is \$50,000.
- 3. The maximum grant for a single applicant is \$20 million.
- 4. The maximum grant for a regional project submitted by multiple applicants is \$20 million per applicant up to a maximum of \$60 million. Each applicant must be a public water system directly benefiting from the project.
- 5. Projects will be assigned points based on three criteria. The points for each criterion will be added together to determine a score for each project. The projects will then be ranked by that score from lowest to highest.
  - Criterion 1 Projects will be ranked by Proposition 50/AB 1747 categories (Attachment B), and by water system population (from highest to lowest) within a category. Points will be assigned from one (for the highest ranked project), up to the number of pre-applications received.
  - <u>Criterion 2</u> Projects will be ranked by reduction of annual volume of Colorado River water demand. Points will be assigned from one (for the highest volume reduced), up to the number of pre-applications received.
  - <u>Criterion 3</u> Projects will be ranked based on the cost per volume of demand reduced. Points will be assigned from one (for the lowest cost per volume), up to the number of pre-applications received.
- 6. Twenty-five percent of the funds will be allocated to disadvantaged communities.
- 7. Applicants proposing projects that reduce demand on State Water Project supplies must execute a continuing transfer of that reduction to another agency such that the long-term demand on Colorado River water will be reduced.

# Attachment A Drinking Water State Revolving Fund (DWSRF) Categories

Category	Description		
DWSRF-A	Demonstrated illness attributable to the water system or system under court-ordered compliance. There are no systems in Category A.		
DWSRF-B	Microbial contamination of the water supply resulting in a repeated coliform bacteria maximum contaminant level (MCL) violation.		
DWSRF-C	Unfiltered surface water or wells that have fecal or E. coli contamination.		
DWSRF-D	Filtered surface water that violates the surface water filtration and disinfection regulation.		
DWSRF-E	Insufficient water source capacity resulting in water outages.		
DWSRF-F	Nitrate/nitrite contamination exceeding MCL.		
DWSRF-G	Chemical contamination (other than nitrate/nitrite) exceeding a primary MCL.		
DWSRF-H	Uncovered distribution reservoirs and low-head lines.		
DWSRF-I	Systems meeting existing MCLs but not proposed microbial MCLs or the California Cryptosporidium Action Plan.		
DWSRF-J	Significant sanitary defect involving sewage.		
DWSRF-K	Disinfection facilities that have defects.		
DWSRF-L	Systems meeting existing MCLs but not future nonmicrobial MCLs or action levels.		
DWSRF-M	Other waterworks standards defects.		
DWSRF-O	Other water system deficiencies.		
DWSRF-X	Combine project with another submitted by system.		
DWSRF-Z	Ineligible projects or systems.		

#### **Attachment B**

#### **Proposition 50/AB 1747 Categories**

50-A Projects addressing microbial contaminants that violate a state or federal primary MCL or violate a drinking water treatment standard.  50-B Projects addressing contaminants that exceed a state or federal primary MCL and that are considered to result in acute health effects, developmental effects, or effects from shorter-term exposure.  50-C Projects addressing an emerging contaminant that is considered to result in acute health effects, developmental effects, or effects from shorter-term exposure, and one for which an MCL will be established and that is identified as a priority, pursuant to AB 1747.  50-D Projects addressing contaminants that exceed a state or federal MCL, and that are given priority by AB 1747.  50-E Projects addressing contaminants that exceed a state or federal primary MCL and that are not identified in 50-A, 50-B, 50-C, or 50-D  50-F Projects addressing an emerging contaminant that is considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified as a priority, pursuant to AB 1747.  50-G Projects addressing contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  50-H Projects addressing contaminants that are detected above a DHS drinking water action level* Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  50-J Other emerging contaminants.	Category	Description	Contaminants Included in Category (or examples of contaminants, for Categories 50-E, 50-H, and 50-I)		
or federal primary MCL and that are considered to result in acute health effects, developmental effects, or effects from shorter-term exposure.  50-C Projects addressing an emerging contaminant that is considered to result in acute health effects, developmental effects, or effects from shorter-term exposure, and one for which an MCL will be established and that is identified as a priority, pursuant to AB 1747.  50-D Projects addressing contaminants that exceed a state or federal MCL, and that are given priority by AB 1747.  50-E Projects addressing contaminants that exceed a state or federal primary MCL and that are not identified in 50-A, 50-B, 50-C, or 50-D  50-F Projects addressing an emerging contaminant that is considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified as a priority, pursuant to AB 1747.  50-G Projects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  50-H Projects addressing contaminants that are detected above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  50-I Projects addressing contaminants that exceed a state secondary MCL.	50-A	a state or federal primary MCL or violate a drinking			
considered to result in acute health effects, developmental effects, or effects from shorter-term exposure, and one for which an MCL will be established and that is identified as a priority, pursuant to AB 1747.  50-D Projects addressing contaminants that exceed a state or federal MCL, and that are given priority by AB 1747.  50-E Projects addressing contaminants that exceed a state or federal primary MCL and that are not identified in 50-A, 50-B, 50-C, or 50-D MTBE  50-F Projects addressing an emerging contaminant that is considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified as a priority, pursuant to AB 1747.  50-G Projects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  50-H Projects addressing contaminants that are detected above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  50-I Projects addressing contaminants that exceed a state secondary MCL.	50-B	or federal primary MCL and that are considered to result in acute health effects, developmental effects, or			
50-D Projects addressing contaminants that exceed a state or federal MCL, and that are given priority by AB 1747.  50-E Projects addressing contaminants that exceed a state or federal primary MCL and that are not identified in 50-A, 50-B, 50-C, or 50-D  50-F Projects addressing an emerging contaminant that is considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified as a priority, pursuant to AB 1747.  50-G Projects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  50-H Projects addressing contaminants that are detected above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  Frojects addressing contaminants that exceed a state secondary MCL.  Frojects addressing contaminants that exceed a state secondary MCL.  Frojects addressing contaminants that exceed a state secondary MCL.  Frojects addressing contaminants that exceed a state secondary MCL.  Frojects addressing contaminants that exceed a state secondary MCL.	50-C	considered to result in acute health effects, developmental effects, or effects from shorter-term exposure, and one for which an MCL will be established			
or federal primary MCL and that are not identified in 50-A, 50-B, 50-C, or 50-D  Trojects addressing an emerging contaminant that is considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified as a priority, pursuant to AB 1747.  Trojects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  Trojects addressing contaminants that are detected above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  Trojects addressing contaminants that exceed a state secondary MCL.  Trojects addressing contaminants that exceed a state secondary MCL.  Trojects addressing contaminants that exceed a state secondary MCL.  Trojects addressing contaminants that exceed a state secondary MCL.  Trojects addressing contaminants that exceed a state secondary MCL.  Trojects addressing contaminants that exceed a state secondary MCL.	50-D		byproducts—TTHMs, HAA5, bromate,		
considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified as a priority, pursuant to AB 1747.  50-G Projects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  50-H Projects addressing contaminants that are detected above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  Frojects addressing contaminants that exceed a state secondary MCL.  Iron, Manganese, Zinc, Total Dissolved Solids (TDS), Specific Conductance, Chloride	50-E	or federal primary MCL and that are not identified in	tetrachloride, DBCP, EDB, PCE, TCE,		
50-G Projects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters, pursuant to AB 1747.  50-H Projects addressing contaminants that are detected above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  Iron, Manganese, Zinc, Total Dissolved Solids (TDS), Specific Conductance, Chloride	50-F	considered to result in chronic health effects (that is, not the effects mentioned in Category 50-C), and one for which an MCL will be established, and that is identified	Chromium-6*		
above a DHS drinking water action level**. Action levels may be established by DHS for emerging contaminants found in drinking water.  50-I Projects addressing contaminants that exceed a state secondary MCL.  Iron, Manganese, Zinc, Total Dissolved Solids (TDS), Specific Conductance, Chloride	50-G	Projects addressing unregulated contaminants detected in drinking water and generally are considered by the scientific community to be endocrine disrupters,	Endocrine disrupters		
50-I Projects addressing contaminants that exceed a state secondary MCL.  Iron, Manganese, Zinc, Total Dissolved Solids (TDS), Specific Conductance, Chloride	50-H	above a DHS drinking water action level**. Action levels may be established by DHS for emerging			
50-J Other emerging contaminants	50-I	Projects addressing contaminants that exceed a state	Dissolved Solids (TDS), Specific		
	50-J	Other emerging contaminants.			

<sup>\*</sup>Chromium-6 is currently regulated under MCL for total chromium and could be considered under 50-E, if the total chromium MCL is exceeded and chromium-6 is contributing to the exceedance. Once a chromium-6-specific MCL is adopted, it would likely move to 50-D or 50-E, pursuant to AB 1747's priorities.

<sup>\*\*</sup> An action level is an advisory level established by DHS for some unregulated chemicals found in drinking water. Over the past two decades, a number of chemical contaminants have proceeded from having action levels to having MCLs, though many have remained with only their action levels. Currently there are 49 contaminants with action levels.

# Attachment C Source Water Protection (SWP) Proposition 50 Categories

Category	Description
SWP-A	Projects addressing possible contaminating activities (PCAs) associated with
	microbial contaminants located in Zone A for a groundwater source or projects
	addressing PCAs associated with microbial contaminants or turbidity in Zones A or
	B for a surface water source.
SWP-B	Projects addressing PCAs associated with contaminants with established maximum
	contaminant levels (MCLs) that may cause acute health effects located in zones for
	groundwater or surface water sources.
SWP-C	Projects addressing PCAs associated with contaminants with established MCLs that
	may cause acute health effects located in the recharge area for a groundwater
	source or within the watershed for a surface water source.
SWP-D	Projects addressing PCAs associated with other contaminants with established
	MCLs located in zones for groundwater or surface water sources.
SWP-E	Projects addressing PCAs associated with other contaminants with established
	MCLs located in the recharge area for a groundwater source or within the
	watershed for a surface water source.
SWP-F	Projects addressing PCAs associated with contaminants without established MCLs
	that may cause acute health effects located in zones for groundwater or surface
	water sources.
SWP-G	Projects addressing PCAs associated with contaminants without established MCLs
	that may cause acute health effects located in the recharge area for a groundwater
	source or within the watershed for a surface water source.
SWP-H	Projects addressing PCAs associated with other contaminants without established
	MCLs located in zones for groundwater or surface water sources.
SWP-I	Projects addressing PCAs associated with other contaminants without established
	MCLs located in the recharge area for a groundwater source or within the
	watershed for a surface water source.

#### **Definitions**

**Possible Contaminating Activity:** A human activity as defined by the California Department of Health Services Drinking Water Source Assessment and Protection program that is an actual or potential origin of contamination for a drinking water source and includes sources of both microbial and chemical contaminants that could have adverse effects upon human health.

**Contaminants that may cause acute health effects**: Contaminants that have the potential to cause acute or immediate health effects, i.e., death, damage, or illness appearing within hours or days after exposure. This definition is limited to microbial contaminants (including turbidity for surface water sources), nitrate and nitrite, and perchlorate, for purposes of this program.

**Zones:** Delineated areas for a source of drinking water established in accordance with the California Department of Health Services Drinking Water Source Assessment and Protection program.

#### Attachment D

### Worksheet to Determine Theoretical Cancer Risk from Disinfection Byproducts (DBPs)

Α	В	С	D	E	F
Disinfection Byproducts (DBPs) Includes total trihalomethanes (TTHM) and Haloacetic acids (HAA5) 1	MCL (in μg/L)	DBP conc. for de minimis cancer risk <sup>1</sup> (µg/L)	Enter average DBP conc. (µg/L) for all DBPs, including TTHM & HAA5 <sup>4</sup>	Divide DBP conc.'s in Column D by Column C, and enter here to yield cancer risk per million	Sum values in Column E at the bottom of this column This is the estimated risk from DBPs in theoretical cancer cases per million people per lifetime.
TTHM	80			•	
Bromodichloromethane (IRIS, 1993)*		0.6			
Bromoform (IRIS, 1991)		4			
Chloroform (IRIS, 1991)		N/A <sup>2</sup>		N/A	
Dibromochloromethane (IRIS, 2002)		0.4			
HAA5	60				
Monochloroacetic Acid		3			
Dichloroacetic Acid (IRIS, 2003)		0.7			
Trichloroacetic Acid (IRIS, 1996)		N/A		N/A	
Monobromoacetic Acid					
Dibromoacetic Acid					
OTHER					
Bromate (IRIS, 2001)	10	0.05			
Chlorite (IRIS, 2000)	1,000	N/A		N/A	Total =

<sup>&</sup>lt;sup>1</sup> (IRIS, date) refers to EPA's Integrated Risk Information System (IRIS), <a href="http://www.epa.gov/iris">http://www.epa.gov/iris</a> and the date of the IRIS Carcinogenicity Assessment, which provides the concentration in drinking water [Column C] that corresponds to an excess lifetime (70-years) cancer risk of up to one case of cancer per one million people.

<sup>&</sup>lt;sup>2</sup> N/A means IRIS does not consider the chemical to pose a cancer risk (chloroform), lacks a quantitative estimate (trichloroacetic acid), or is not classifiable as to cancer risk (chlorite).

<sup>&</sup>lt;sup>3</sup> — indicates no information available from EPA's IRIS.

<sup>&</sup>lt;sup>4</sup> Water systems ≥10,000 population use last five years quarterly data; other systems use all data.