The Discharger shall develop a Pesticides Application Plan (PAP) that contains the following elements:

1. **Description of ALL target areas, if different from the water body of the target area, in to which larvicides and adulticides are being planned to be applied or may be applied to control vectors. The description shall include adjacent areas, if different from the water body of the target areas**;

   Because it is difficult to predict where vector populations and/or vector borne disease occurrence will happen in a given year, the District may need to make pesticide applications to, near or over other water bodies in Placer County should circumstances require. Please see the attached map and listing of all water bodies in Placer County.

2. **Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**
   Pesticide applications are one component to the District's Integrated Pest Management plan for mosquitoes and other vectors. It is the practice of the District to conduct continuous surveillance to locate areas of standing water that may support mosquito development. The District, by identifying recurrent and persistent mosquito development sources, is able to inspect these locations on a regular basis for mosquito larvae. If at least one mosquito in 20 dips is found, physical control measures are considered. This may include draining the water if feasible, reducing or eliminating the source of the water, working with landowners to change the condition of the water or vegetation in or around the water in a way that discourages mosquito development. If physical control measures are sufficient to reduce mosquito larvae numbers to below the treatment threshold, no further action is taken. If physical control is not sufficient, biological control is considered.

   The District has recently developed a mosquitofish (Gambusia affinis) rearing facility that provides a limited amount of mosquitofish for use as a biological control agent against mosquito larvae. District Field Technicians are trained in District policies and procedures to place mosquitofish in contained standing water sources such as unmaintained swimming pools, stock troughs, ornamental ponds, etc. In some cases mosquitofish may be used in irrigated agricultural areas, irrigation canals, and some constructed wetlands. In the future, other mosquito-eating-fish or other biological control agents will be considered and evaluated for use should they become available.

   If physical control and biological control measures are insufficient to reduce mosquito larvae populations to below the treatment threshold, biorational larvicides are used. If adult mosquito numbers reach treatment thresholds for the particular species and trap type, adulticide application is considered. On a case-by-case basis, specific factors that affect the level of public health risk and efficacy of a potential the species, location, presence of vector-borne disease, surrounding area, risk for non-target effects,

3. Pesticide products or types expected to be used and if known, their degradation by-products, the method in which they are applied, and if applicable, the adjuvants and surfactants used;

The following list of products may be used by the District for larval or adult control. This list is directly from Attachment E and F within the NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. for Vector Control Applications. All of these products are used according to label directions and may be applied by ground (hand, truck, ATV, backpack, etc) or by air (helicopter or fixed wing aircraft).

List of Permitted Larvicide Products

Larvicide Product Name	Registration Number
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac Technical Powder	73049-13
Vectobac-12 AS	73049-38
Aquabac 200G	62637-3
Teknar HP-D	73049-404
Vectobac-G Biological Mosquito Larvicide Granules	73049-10
Vectomax CG Biological Larvicide	73049-429
Vectomax WSP Biological Larvicide	73049-429
Vectomax G Biological Larvicide/Granules	73949-429
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Briquets	2724-375
Zoecon Altosid Liquid Larvicide Mosquito Growth Regulator	2724-392
Zoecon Altosid XR Entended Residual Briquets	2724-421
Zoecon Altosid Liquid Larvicide Concentrate	2724-446
Zoecon Altosid XR-G	2724-451
Zoecon Altosid SBG Single Brood Granule	2724-489
Mosquito Larvicide GB-1111	8329-72
BVA 2 Mosquito Larvicide Oil	70589-1
BVA Spray 13	55206-2
Agnique MMF Mosquito Larvicide & Pupicide	53263-28

Larvicide Product Name	Registration Number
Agnique MMF G	53263-30
Abate 2-BG	8329-71
5% Skeeter Abate	8329-70
Natular 2EC	8329-82
Natular G	8329-80
Natular XRG	8329-83
Natular XRT	8329-84
FourStar Briquets	83362-3
FourStar SBG	85685-1
Aquabac xt	62637-1
Spheratax SPH (50 G) WSP	84268-2
Spheratax SPH (50 G)	84268-2

List of Permitted Adulticide Products

Adulticide Product Name	Registration Number
Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7395	1021-1570
Evergreen Crop Protection EC 60-6	1021-1770
Pyrenone Crop Spray	432-1033
Prentox Pyronyl Crop Spray	655-489
Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7396	1021-1569
Aquahalt Water-Based Adulticide	1021-1803
Pyrocide Mosquito Adulticide 7453	1021-1803
Pyrenone 25-5 Public Health Insecticide	432-1050
Prentox Pyronyl Oil Concentrate #525	655-471
Prentox Pyronyl Oil Concentrate or 3610A	655-501
Permanone 31-66	432-1250
Kontrol 30-30 Concentrate	73748-5
Aqualuer 20-20	769-985
Aqua-Reslin	432-796
Aqua-Kontrol Concentrate	73748-1
Kontrol 4-4	73748-4
Biomist 4+12 ULV	8329-34
Permanone RTU 4%	432-1277

Adulticide Product Name	Registration Number
Prentox Perm-X UL 4-4	655-898
Allpro Evoluer 4-4 ULV	769-982
Biomist 4+4	8329-35
Kontrol 2-2	73748-3
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 18%+54% MF Formula II	432-667
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 4%+12% MF Formula II	432-716
Anvil 10+10 ULV	1021-1688
AquaANVIL Water-based Adulticide	1021-1807
Duet Dual-Action Adulticide	1021-1795
Anvil 2+2 ULV	1021-1687
Zenivex E20	2724-791
Trumpet EC Insecticide	5481-481
Fyfanon ULV Mosquito	67760-34

4. **Description of ALL the application areas and the target areas in the system that are being planned to be applied or may be applied. Provide a map showing these areas;**
   Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the Placer Mosquito and Vector Control District's preferred solution, and whenever possible the agency works with property owners to affect long-term solutions to reduce or eliminate the need for continued applications as described in Item 2 above. Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather and variations in local environmental conditions. However, the typical sources treated by this agency include:

Catch Basin
Container
Ditch
Drains
Field: Fallow
Field: Non-Rice Irrigated
Field: Non-Rice Unspecified
Field: Rice Conventional
Field: Rice Organic
Fountain
Hole
Lake
Log Decks
Low Area
Ornamental Pond
Pond
Septic
Slough
Storm Water Structure
Stream
Swimming Pool
Treeholes
Waste Water Treatment Plant
Water Trough

Wetland

The Placer Mosquito and Vector Control District has jurisdiction over the entire area of the County of Placer. Adulticide applications have been made generally in the western portion of the county by ground and air since the District began operations in 2001. Since 2009, mosquito adulticides have been applied to, over or near the following water bodies:

1. Antelope Canal
2. Antelope Creek
3. Auburn Ravine
4. Baltimore Ravine
5. Barton Canal
6. Baughman Canal
7. Bear River
8. Bear River Canal
9. Ben Franklin Canal
10. Big Snyder Gulch
11. Boardman Canal
12. Bowman Canal
13. Bowman Feeder Canal
14. Brushy Creek
15. Bunch Canyon
16. Campbell Creek
17. Caperton Canal
18. Caps Ravine
19. Cirby Creek
20. Clipper Creek
21. Clover Valley Creek
22. Codfish Creek
23. Combie Aqueduct
24. Combie Ophir Canal
25. Coon Creek
26. Coyote Creek
27. Curry Creek
28. Deadman Canyon
29. Devils Canyon
30. Doty Ravine
31. Doty Ravine North Canal
32. Dry Creek
33. Dry Creek
34. Dudley Canal
35. Dutch Ravine
36. Eden Valley
37. Fiddler Green Canal
38. First Brushy Canyon
39. Folsom Lake
40. Gas Canyon
41. Georges Ravine
42. Gold Blossom Canal
43. Gold Hill Canal
44. Halsey Afterbay
45. Halsey Forebay
46. Hidden Valley
47. Kaseberg Creek
48. King Slough
49. Lake Arthur
50. Lake Combie
51. Lake Theodore
52. Lincoln Canal
53. Linda Creek
54. Live Oak Ravine
55. Lone Star Canal
56. Lower Fiddler Green Canal
57. Markham Ravine
58. Middle Branch Owl Creek
59. Mile Hill Creek
60. Miners Ravine
61. Morgan Canal
62. Mormon Ravine
63. Newcastle Canal
64. North Branch Owl Creek
65. North Ravine
66. Ophir Canal
67. Orchard Creek
68. Orr Creek
69. Owl Creek
70. Peachstone Gulch
71. Penryn Canal
72. Perry Canal
73. Pleasant Grove Creek
74. Red Ravine Canal
75. Robbers Ravine
76. Rock Creek
77. Rock Creek Lake
78. Sailors Ravine
79. Secret Ravine

80. Sewage Treatment Ponds in the Secret Ravine Watershed
81. Shirland Canal
82. Slaughter Ravine
83. Sleepy Hollow
84. Slug Gulch
85. Smuthers Ravine
86. South Branch Owl Creek
87. South Branch Pleasant Grove Creek
88. South Canal
89. South Sutter Ditch
90. Spring Garden Ravine
91. Sucker Ravine
92. Sugarloaf Canal
93. Todd Creek
94. Treatment Pond Runoff
95. Turner Canal
96. U.S. Canyon
97. Unnamed streams in the Antelope Creek Watershed
98. Unnamed streams in the Auburn Ravine Watershed
99. Unnamed streams in the Brushy Creek Canyon Watershed
100. Unnamed streams in the Campbell Creek Watershed
101. Unnamed streams in the Cirby Creek Watershed
102. Unnamed streams in the Codfish Creek Canyon Watershed
103. Unnamed streams in the Coon Creek Watershed
104. Unnamed streams in the Cross Canal Watershed
105. Unnamed streams in the Curry Creek Watershed
106. Unnamed streams in the Doty Ravine Watershed
107. Unnamed streams in the Dry Creek Watershed
108. Unnamed streams in the Eden Valley Watershed
109. Unnamed streams in the Gas Canyon Watershed
110. Unnamed streams in the Hayford Hill Watershed
111. Unnamed streams in the Live Oak Ravine Watershed
112. Unnamed streams in the Lower Bear River Watershed
113. Unnamed streams in the Lower Middle Fork of the American River Watershed
114. Unnamed streams in the Lower North Fork of the American River Watershed
115. Unnamed streams in the Lower Pleasant Grove Creek Watershed
116. Unnamed streams in the Markham Ravine Watershed
117. Unnamed streams in the Middle North Fork of the American River Watershed
118. Unnamed streams in the Miners Ravine Watershed
119. Unnamed streams in the Mormon Ravine Watershed
120. Unnamed streams in the North Sheridan Watershed
121. Unnamed streams in the Secret Ravine Watershed
122. Unnamed streams in the Sheridan Watershed
123. Unnamed streams in the Slaughter Ravine Watershed
124. Unnamed streams in the South Branch Pleasant Grove Creek Watershed
125. Unnamed streams in the South Sheridan Watershed
126. Unnamed streams in the Steelhead Creek Watershed
127. Unnamed streams in the Unnamed Watershed 4 of the Auburn Ravine Watershed
128. Unnamed streams in the Unnamed Watershed 5 of the Pleasant Grove Creek Watershed
129. Unnamed streams in the Upper Bunch Canyon Watershed
130. Unnamed streams in the Upper Pleasant Grove Creek Watershed
131. Unnamed streams in the Yankee Slough Watershed
132. Upper Bowman Canal
133. Valley View Canal
134. Wise Canal

135. Wise Forebay
136. Wooley Creek
137. Yankee Slough

The District typically applies both larvicides and adulticides by ground-based equipment. The only areas where aerial applications are commonly made are over and near the irrigated agricultural lands along the western boarder of Placer County. In these areas both larvicides and adulticides are applied by aircraft due to the size of the target areas, and can vary from year to year based on vector populations and environmental factors. If epidemic conditions were to occur, aerial applications of mosquito adulticides may be made to the affected area to limit the numbers of infected adult mosquitoes.

5. Other control methods used (alternatives) and their limitations;

With any source of mosquitoes or other vectors, the Placer Mosquito and Vector Control District's first goal is to look for ways to eliminate the source, or if that is not possible, for ways to reduce the potential for vectors. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California.

Specific methods used by the agency include stocking mosquito fish (*Gambusia affinis*), educating residents that mosquitoes develop in standing water and encouraging them to remove sources of standing water on their property, and working with property owners to find long-term water management strategies that meet their needs while minimizing the need for public health pesticide applications.

6. How much product is needed and how this amounts was determined;

The need to apply product is determined by surveillance. Actual use varies annually depending on mosquito abundance. The pesticide amounts presented below were taken from the Placer Mosquito and Vector Control District's 2010 PUR as an estimate of pesticide use in 2011. Other public health pesticides in addition to those listed below may be used as part of the agency's best management practices.

Active Ingredient and Formulation	Pounds	Gallons
Bacillus thuringensis israliensis (Bti) Liquid		5782.45
Bacillus sphericus (Bsph)WDG	2200	
Bti Granule	6626.3	
Bti/Bsph Granule	102.26	
Methoprene Briquets 30 Day	0.2844	
Methoprene Briquets 120 Day	2.47	
Methoprene Pellets	165.575	
Poly-w-hydroxy (Agnique™) liquid		0.06155
GB 1111 Mineral Oil		50.91
10% Sumithrin		225

5% Pyrethrin	97.65
6% Pyrethrin	22.7
4% Resmethrin	27.89
Permethrin	0.132622
Naled (Trumpet)	225

7. **Representative monitoring locations* and the justification for selecting these monitoring locations**
   Please see the MVCAC NPDES Coalition Monitoring Plan

8. **Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts; and**

   Site specific mosquito reduction BMPs that reduce the need for pesticide applications are considered where feasible. For example, the District works closely with landowners, agencies, and organizations that have standing water as part of their normal operations. This includes farmers who use flood irrigation techniques, waste water treatment plant managers, and the habitat conservation community. When the District discovers an area with standing water that produces mosquitoes though inspection of the standing water or through use of adult mosquito traps in the area, the District will work with the responsible party to cooperatively develop a plan to reduce or eliminate the mosquitoes at that site. Specific measures that are considered in the plan are: alternative practices that do not allow water to stand for more than 96 hours, containment of standing water in a manner that discourages mosquito development (deep, permanent, no emergent vegetation, supports natural predators of mosquitoes), vegetation management, use of mosquitofish to keep mosquito larvae below threshold levels, communication to the District of water management practices that affect mosquito control populations or control efforts (flooding a field, draining a field). Physical control measures such as maintenance of channels to prevent flooding that produces mosquitoes may completely eliminate the need for a pesticide application, while other efforts may reduce the number of applications necessary. The relative efficacy of the mosquito reduction BMP plan is assessed by looking for the reduction in the need for pesticide treatments over time, reduction of the populations of mosquitoes (larval and adult) over time, and the reduction of mosquito habitat duration and extent.

9. **Description of the BMPs to be implemented. The BMPs shall include at a minimum:**
   The Placer Mosquito and Vector Control District's BMPs are described in the Best Management Practices for Mosquito Control in California and in the California Mosquito-borne Virus Surveillance and Response Plan. Specific elements have been highlighted below under items a-f.

a. measures to prevent pesticide spill;
All pesticide applicators receive annual spill prevention and response training. Agency employees ensure daily that application equipment is in proper working order. Spill mitigation devices are placed in all vehicles and pesticide storage areas.

b. measures to ensure that only a minimum and consistent amount is used
Application equipment is calibrated at least annually as required by the Department of Pesticide Regulations (DPR) and the terms of a cooperative agreement with the California Department of Public Health (CDPH).

c. a plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects to waters of the U.S. from the pesticide application;
This will be included in our pesticide applicators annual pesticide application and safety training, continuing education programs, and/or regional NPDES Permit training programs.

d. descriptions of specific BMPs for each application mode, e.g. aerial, truck, hand, etc.;
The Placer Mosquito and Vector Control District calibrates truck-mounted and handheld larviciding equipment each year to meet application specifications. Supervisors review application records daily to ensure appropriate amounts of material are being used. Ultra-low volume (ULV) application equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. Aerial adulticide equipment is calibrated regularly and droplet size will be monitored by the agency to ensure droplets meet label requirements. Airplanes used in urban ULV applications and the primary airplane used for rural ULV application is equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended area. If a secondary airplane is used in rural ULV applications it will be equipped with an advanced guidance system.

e. descriptions of specific BMPs for each pesticide product used; and
Please see the Best Management Practices for Mosquito Control in California for general pesticide application BMPs, and the current approved pesticide labels for application BMPs for specific products.

f. descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland).
Please see the Best Management Practices for Mosquito Control in California.

10. Identification of the problem. Prior to first pesticide application covered under this General Permit that will result in a discharge of biological and residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first

pesticide application for that calendar year, the Discharger must do the following for each vector management area:

a. If applicable, establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies;

The Placer Mosquito and Vector Control District staff only applies pesticides to sources of mosquitoes that represent imminent threats to public health or quality of life. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the agency's resources, disease activity, surveillance data, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.

b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species; Please see Item 2 above. Below is a list of mosquito species that have been documented in Placer County.

Aedes bicristatus
Aedes cataphylla
Aedes clivis
Aedes fitchii
Aedes hemiteleus
Aedes hexodontus
Aedes increpitus
Aedes melanimon
Aedes nigromaculis
Aedes schizopinax
Aedes sierrensis
Aedes tahoensis
Aedes ventrovittus
Aedes vexans
Aedes washinoi
Anopheles franciscanus
Anopheles freeborni
Anopheles occidentalis
Anopheles punctipennis
Coquillettidia perturbans
Culex apicalis
Culex boharti
Culex erythrothorax
Culex pipiens
Culex stigmatosoma
Culex tarsalis
Culex territans
Culex thriambus
Culiseta incidens
Culiseta inornata
Culiseta particeps

c. Identify known breeding areas for source reduction, larval control program, and habitat management; and

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the agency's preferred solution, and whenever possible the agency works with property owners to implement long-term solutions to reduce or eliminate the need for continued pesticide applications as described in Item 2 above.

d. Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.

This process is provided in the Item 2 above. The Placer Mosquito and Vector Control District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results, and monitors regional mosquito-borne disease activity detected in humans, horses, birds, and/or other animals, and uses these data to guide mosquito control activities.

11. Examination of Alternatives. Dischargers shall continue to examine alternatives to pesticide use in order to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:

a. Evaluating the following management options, in which the impact to water quality, impact to non-target organisms, vector resistance, feasibility, and cost effectiveness should be considered:

- **No action**
- **Prevention**
- **Mechanical or physical methods**
- **Cultural methods**
- **Biological control agents**
- **Pesticides**

If there are no alternatives to pesticides, dischargers shall use the least amount of pesticide necessary to effectively control the target pest.

The Placer Mosquito and Vector Control District's uses the principles and practices of Integrated Vector Management (IVM) as described on pages 26 and 27 of the Best Management Practices for Mosquito Control in California. As stated in item #10 above, locations where vectors may exist are assessed, and the potential for using alternatives to pesticides is determined on a case-by-case basis. Commonly considered alternatives include: 1) Eliminate artificial sources of standing water; 2) Ensure temporary sources of surface water drain within four days (96 hours) to prevent adult mosquitoes from developing; 3) Control plant growth in ponds, ditches, and shallow wetlands; 4) Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes; and 5) Use appropriate biological control methods that are available. Additional alternatives to using pesticides for managing mosquitoes are listed on pages 4-19 of the Best Management Practices for Mosquito Control in California.

Implementing preferred alternatives depends on a variety of factors including availability of agency resources, cooperation with stakeholders, coordination with other regulatory agencies, and the anticipated efficacy of the alternative. If a pesticide-free alternative does not sufficiently reduce the risk to public health, pesticides are considered, beginning with the least amount necessary to effectively control the target vector.

b. Applying pesticides only when vectors are present at a level that will constitute a nuisance.

Adult mosquito levels are regularly measured by approximately 40 CO2-baited traps placed throughout the District. These traps are set for 24 hours each week during the mosquito season to determine the abundance and diversity of adult mosquitoes. In addition, trapped mosquitoes are grouped into samples which are tested for presence of West Nile Virus. These results are used to determine the relative risk for human injury or illness caused by mosquitoes.

The Placer Mosquito and Vector Control District follows an existing IVM program which includes practices described in the Item 2 above.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §2002(j). This definition allows vector control agencies to address situations where even a low number of vectors may pose a substantial threat to public health and quality of life. In practice, the definition of a "nuisance" is generally only part of a decision to apply pesticides to areas covered under this permit. As summarized in the California Mosquito-borne Virus Surveillance and Response Plan, the overall risk to the public when vectors and/or vector-borne disease are present is used to select an available and appropriate material, rate, and application method to address that risk in the context of our IVM program.

12. Correct Use of Pesticides

Coalition's or Discharger's use of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the right spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

This is an existing practice of the Placer Mosquito and Vector Control District, and is required to comply with the Department of Pesticide Regulation's (DPR) requirements and the terms of the District's Cooperative Agreement with the California Department of Public Health (CDPH). All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

13. If applicable, specify a website where public notices, required in Section VIII.B, may be found.

www.placermosquito.org

References:

Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.westnile.ca.gov/resources.php under the heading *Mosquito Control and Repellent Information*. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Placer Mosquito and Vector Control District at (916) 380-5444.

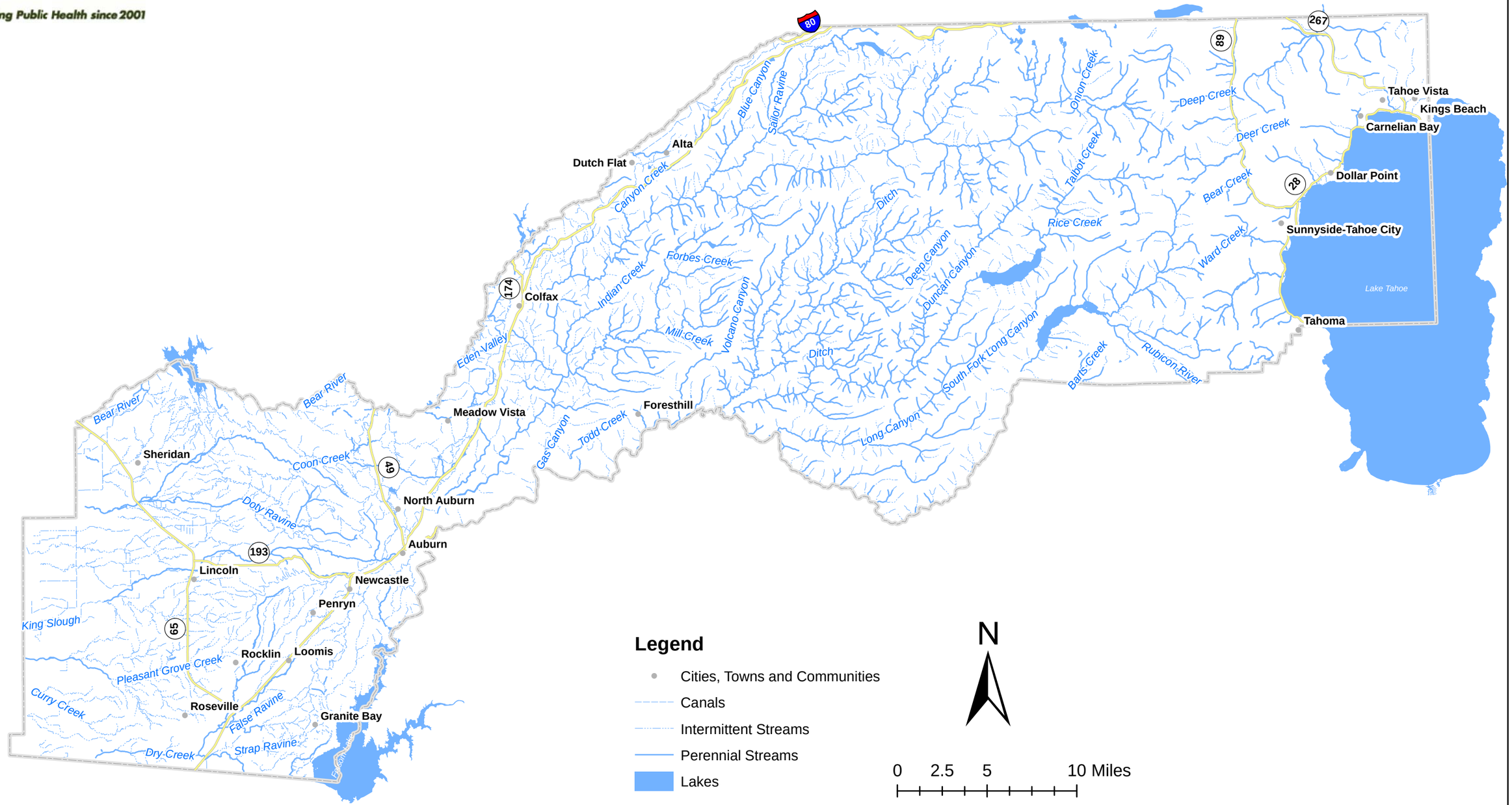
California Mosquito-borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by CDPH]. . Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.westnile.ca.gov/resources.php under the heading *Response Plans and Guidelines*. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Placer Mosquito and Vector Control District at (916) 380-5444.

MVCAC NPDES Coalition Monitoring Plan. 2011. [In development at the time of this draft]

PLACER MOSQUITO & VECTOR CONTROL DISTRICT

Protecting Public Health since 2001

Placer Mosquito and Vector Control District Boundaries



Legend

- Cities, Towns and Communities
- Canals
- Intermittent Streams
- Perennial Streams
- Lakes

N

0 2.5 5 10 Miles