

POTENTIAL RESOURCE ISSUES:

- Protection of special-status wildlife species and their habitats.
- Effectiveness of wildlife bridges and escape ramps.

PROJECT NEXUS:

- Project operations and maintenance activities could disturb or result in direct loss of special-status wildlife species or their habitat.
- Project flowlines could result in mortality of wildlife.

POTENTIAL LICENSE CONDITIONS:

- Vegetation and Integrated Pest Management Plan.
- Special-status bat protection measures.
- Special-status wildlife protection measures.
- Modification of existing wildlife bridges and escape routes or development of new protective measures.

STUDY OBJECTIVES:

- Identify special-status wildlife species potentially occurring in California Wildlife Habitat Relationships (CWHR) habitats documented as part of the TERR 1 – Botanical Resources Technical Study Plan (TSP).
- Determine whether Project transmission line, transmission tap line, and power line configurations are consistent with guidelines for the avoidance of avian mortalities.
- Document use of Project facilities by special-status bats during reproduction or other seasonal use.
- Evaluate the use of wildlife bridges and escape ramps by mule deer and other animals, including livestock.
- Document mortality of wildlife/livestock in Project flowlines.

EXTENT OF STUDY AREA:Special-Status Wildlife Surveys

- For identification of special-status species potentially occurring in CWHR habitats, the study area is 1 mile around Project facilities (see Table TERR 2-1); and
- For wildlife reconnaissance surveys, the study area is the area where operations and/or maintenance occurs around Project facilities, plus a protective buffer. Refer to Table TERR 2-2 for the survey area by facility type.

Evaluation of Transmission Line, Transmission Tap Line, and Power Line Configurations

- For the evaluation of consistency with guidelines for the avoidance of avian mortalities, the study area is Project transmission lines, transmission tap lines, and power lines (see Table TERR 2-1).

Special-Status Bat Reproductive and Seasonal Use Surveys

- For special-status bat reproductive and seasonal use surveys, the study area is the Project facilities listed in Table TERR 2-3 and shown in Map TERR 2-1.

Evaluation of Wildlife Use of Wildlife Bridges and Escape Ramps

- For the evaluation of the use of wildlife bridges and escape ramps, the study area is the wildlife monitoring sites at the wildlife bridges and wildlife escape ramps shown in Map TERR 2-2.

Evaluation of Wildlife/Livestock Mortality in Project Flowlines

- For the evaluation of mortality of wildlife/livestock, the study area includes all portions of the Project flowlines under FERC jurisdiction (see Table TERR 2-1).

STUDY APPROACH:

For the purposes of this study, a special-status wildlife species is defined as any animal species that is granted status by a federal or state agency. Federally listed species granted status by the U.S. Fish and Wildlife Service (USFWS) under the ESA include Federal Threatened (FT), Federal Endangered (FE), Federal Proposed Threatened or Endangered (FPT, FPE), candidates for listing (FC), or proposed for delisting (FPD). Also included are those species listed by USFWS as Birds of Conservation Concern (BCC) which include “species, subspecies, and populations of all migratory nongame birds that, without additional conservation action, are likely to become candidates for listing under the ESA of 1973” (USFWS 2008).

The Bureau of Land Management (BLM) also maintains lists of BLM sensitive species (BLMS) that are not federally listed but that are designated by the BLM State Director for special management consideration.

State of California listed wildlife species which are granted status by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA) include threatened (ST), endangered (SE), Fully Protected species (CFP), and California Species of Special Concern (CSC).

The study approach for special-status wildlife surveys; evaluation of Project transmission line, transmission tap line, and power line configurations; special-status bat surveys, and the evaluation of the effectiveness of wildlife bridges and escape ramps is provided below.

Special-Status Wildlife Surveys

- Identify and map known occurrences of special-status wildlife species within 0.25 mile of Project facilities and bypass reaches based on agency consultation and a review of existing information. Preliminary information is presented in the Kaweah Project (FERC No. 298) Draft Existing Resource Information Report, Chapter 3.6, Botanical and Wildlife Resources (SCE 2015).
- Identify special-status wildlife species potentially occurring within CWHR designations based on A Guide to Wildlife Habitats of California (Meyer and Laudenslayer 1988). Preliminary information is presented in the Kaweah Project (FERC No. 298) Draft Existing Resource Information Report, Chapter 3.6, Botanical and Wildlife Resources (SCE 2015).

- Vegetation alliances and CWHR habitats will be documented as part of the TERR 1 – Botanical Resources TSP.
- Conduct wildlife reconnaissance surveys in conjunction with special-status plant surveys. Refer to the Table TERR 2-2 for the survey area for special-status plants.
 - Species will be recorded as present if they are observed, species-specific vocalizations are heard, or if diagnostic field signs are found (e.g., scat, tracks, pellets).
 - Wildlife taxonomy will be based on California's Wildlife, Volumes I, II, and III (Zeiner et al. 1988-1990).
 - Survey methods will include both zigzag and linear transects depending on the survey area and terrain. Zigzag transects cover more ground and work well in larger habitat areas (e.g., mixed conifer forest) while linear transects work well in narrow habitats (e.g., riparian).
 - For each special-status species observed, a California Natural Diversity Database (CNDDDB) field survey form will be completed and submitted to CDFW.
 - Provide an electronic database (Excel spreadsheet) of special-status wildlife to BLM, resource agencies, and interested stakeholders.
- Record incidental observations of any special-status species during all field surveys completed in support of the relicensing of the Kaweah Project.

Evaluation of Transmission Line, Transmission Tap Line, and Power Line Configurations

- Map the location of Project transmission lines, transmission tap lines, and power lines.
- Document the configuration of transmission line, transmission tap line, and power line poles and evaluate their consistency with Avian Power Line Interaction Committee (APLIC) guidelines.
- Document any past avian electrocutions and mortalities on Project transmission lines, transmission tap lines, and power lines based on SCE and resource agency consultation.
- Provide an electronic database (Excel spreadsheet) of avian electrocutions and mortalities to BLM, resource agencies, and interested stakeholders.

Special-Status Bat Reproductive and Seasonal Use Surveys

Conduct reproductive surveys (including roost surveys, acoustic sampling, and mist nest sampling) and seasonal use surveys, as described below.

Reproductive Surveys

Reproductive surveys include roost surveys, acoustic sampling, and mist nest sampling. SCE will provide an electronic database (Excel spreadsheet) of special-status bat survey data to BLM, resource agencies, and interested stakeholders. Each of these surveys is described below.

Roost Surveys

- Conduct roost surveys at Project facilities potentially supporting roosting bats (refer to Table TERR 2-3). Surveys will be conducted during the summer reproductive season (August through September) when maternal colonies may be present.
- Facilities will be searched for bats or bat sign (e.g., guano and culled insect parts). Any location where bat species cannot be determined from visual evaluations will be monitored at emergence time using mist netting and acoustic equipment.

Acoustic Sampling

- Conduct acoustic sampling (i.e., sampling of echolocation calls) during the summer reproductive season at the locations identified on Map TERR 2-1, as well as any additional locations where bats were detected during roost surveys, but were not identified to species.
 - Acoustic sampling will be conducted using an Anabat II bat detector system (Titley Electronics) to identify bat species. The Anabat system detects bat ultrasonic echolocation calls in the field and uses a z-caim unit to convert the detected signals into time/frequency (kilohertz (kHz)) graphs on a laptop computer. Acoustic units (Anabat bat detector, z-caim, and laptop) will be placed in appropriate settings to collect bat calls.
 - The acoustic units will be operated at the selected sites for five nights from sunset until sunrise.

Mist Net Sampling

- Conduct nighttime mist net sampling at the locations at the locations identified on Map TERR 2-1 (as well as any additional locations where bats were detected during roost surveys, but were not identified to species) to determine species assemblage during the reproductive season.
 - Mist nets will be set up for one night, from sunset to 1 AM, in locations where active roosts are identified.
 - Captured bats will be identified to species. Other information collected will include sex, age (juvenile or adult), reproductive status, and forearm measurements.
- Captured bats will be released on-site and echolocation calls recorded at the time of release.

Seasonal Use Surveys

- Conduct an additional survey in October at those locations where active roosts were identified and/or within flight corridors between roost sites and potential foraging habitat to determine seasonal patterns of use. This survey will include using mist nets and acoustic equipment as described above.
- Develop a Geographic Information System (GIS) map of special-status bat roosts and overlay information on Project facilities.

Evaluation of Wildlife Use of Wildlife Bridges and Escape Ramps

Document use of wildlife bridges and escape ramps by mule deer and other animals crossing the Kaweah No. 2 and 3 flowlines. Refer to Map TERR 2-2 for the location of wildlife bridges and escape ramps.

- Monitor wildlife movements using game tracking cameras installed at selected wildlife monitoring locations. The wildlife monitoring locations, shown on Map TERR 2-2, were selected considering the following:
 - Locations where wildlife bridges and escape ramps are co-located, and therefore can be evaluated simultaneously.
 - Locations in Important Winter Range for the Kaweah Mule Deer Herd (refer to Map TERR 2-2). Monitoring sites both within and outside of Important Winter Range were selected.
 - Sites across vegetation alliances.
- Conduct monitoring for 5 weeks in late November/early December and 5 weeks in late March/early April during seasonal movements of the Kaweah Mule Deer Herd.
 - At each monitoring site, cameras will be mounted to maximize the potential to detect and record wildlife movements in the vicinity of the selected wildlife bridges and escape ramps. Cameras will be installed based on site-specific characteristics including, but not limited to, the range and sensitivity of the camera, the length/span of the wildlife bridge, location of trees or other objects potentially obscuring the view of the camera, and the slope of the site.
- Download data from cameras on a weekly basis. The following data will be recorded:
 - Date and time of photograph.
 - Species shown in photograph.
 - Action documented in photograph (e.g., successful or unsuccessful use of wildlife bridge or escape ramp).
- Provide an electronic database (Excel spreadsheet) of wildlife use of bridges and escape ramps to BLM, resource agencies, and interested stakeholders.

Evaluation of Wildlife/Livestock Mortality in Project Flowlines

- Review and summarize historic information on wildlife/livestock mortality in Project flowlines and update through study implementation period.

SCHEDULE:

Date	Activity
March–April 2018	Conduct evaluation of wildlife use of bridges and escape ramps
June 2018	Conduct wildlife reconnaissance surveys in conjunction with late-season special-status plant surveys and monitor use of wildlife bridges
August/September 2018	Conduct special-status bat reproductive surveys
October 2018	Conduct special-status bat seasonal use surveys and monitor use of wildlife bridges
November–December 2018	Conduct evaluation of wildlife use of bridges and escape ramps and analyze data, summarize historic information on wildlife/livestock mortality in Project flowlines, and prepare draft report
January 2019	Distribute draft report to stakeholders
February–April 2019	Stakeholders review and provide comments on draft report (90 days)
April–May 2019	Resolve comments and prepare final report
August 2019	Distribute final report in Draft License Application

REFERENCES:

- Mayer, K.E., and W.F. Laudenslayer. 1988. A Guide to Wildlife Habitats of California. State of California, Department of Fish and Game. Sacramento, CA.
- Southern California Edison Company (SCE). 2015. Kaweah Project (FERC No. 298) Draft Existing Resource Information Report.
- Zeiner, D., W. Laudenslayer, Jr., K. Mayer, and M. White, eds. 1988-1990. California's Wildlife Volumes I, II, and III. California Department of Fish and Game, Sacramento, California.

TABLES

Table TERR 2-1. Project Facilities and Relationship to FERC Project Boundary.

Project Facility	Within FERC Project Boundary	Portion of Facility Outside FERC Project Boundary		
		Entirely on Private Property	Partially on Private Property	Partially on NPS Property
Diversion Dams and Pools				
Kaweah No. 1 Diversion Dam and Pool (East Fork Kaweah River)	X			
Kaweah No. 2 Diversion Dam and Pool (Kaweah River)	X			
Flowlines				
Kaweah No. 1 Flowline	X			
Kaweah No. 2 Flowline	X			
Kaweah No. 3 Flowline	X			
Forebays				
Kaweah No. 1 Forebay Tank and Spillway	X			
Kaweah No. 2 Forebay and Spillway	X			
Kaweah No. 3 Forebay and Spillway	X			
Penstocks				
Kaweah No. 1 Penstock	X			
Kaweah No. 2 Penstock	X			
Kaweah No. 3 Penstock	X			
Powerhouses and Switchyards				
Kaweah No. 1 Powerhouse and Switchyard	X			
Kaweah No. 2 Powerhouse and Switchyard	X		X (Tailrace Only)	
Kaweah No. 3 Powerhouse and Switchyard	X			
Transmission Lines and Transmission Tap Lines				
Kaweah No. 3 Powerhouse to Three Rivers Substation Transmission Line	X			
Kaweah No. 1 Powerhouse Transmission Tap Line	X			
Kaweah No. 2 Powerhouse Transmission Tap Line	X			
Power Lines				
Kaweah No. 1 Diversion Intake House Solar Panel to Kaweah No. 1 Diversion Dam Power Line (solar)	X		X	
Kaweah No. 1 Switchyard to Kaweah No. 1 Maintenance Building Power Line	X			
Kaweah No. 1 Switchyard to Kaweah No. 1 Office Building Power Line	X			
Kaweah No. 1 Switchyard to Kaweah No. 1 Old Machine Shop Power Line	X			
Kaweah No. 1 Switchyard to K1 Workshop Power Line	X			
Kaweah No. 1 Office Building to K1 Forebay Tank Power Line	X			

Table TERR 2-1. Project Facilities and Relationship to FERC Project Boundary.

Project Facility	Within FERC Project Boundary	Portion of Facility Outside FERC Project Boundary		
		Entirely on Private Property	Partially on Private Property	Partially on NPS Property
Power Lines (continued)				
Kaweah No. 1 Powerhouse Campus Alternate Power Line	X			
Kaweah No. 2 Diversion/Flowline Gage and Kaweah No. 3 Powerhouse Alternate Power Line	X			X
Kaweah No. 2 Powerhouse Alternate Power Line	X			
Kaweah No. 2 Powerhouse to Kaweah No. 2 Forebay Power Line	X			
Kaweah No. 3 Powerhouse to Kaweah No. 2 Diversion Power Line	X			
Kaweah No. 3 Powerhouse to Kaweah No. 2 Flowline Gage Power Line	X			X
Kaweah No. 3 Powerhouse to Kaweah No. 3 Forebay Power Line	X			
Communication Lines				
Kaweah No. 1 Powerhouse to Kaweah No. 1 Office Building Fiber Communication Line	X			
Kaweah No. 1 Office Building to Kaweah No. 1 Forebay Tank Fiber Communication Line	X			
Kaweah No. 2 Diversion Dam to Kaweah No. 3 Powerhouse Fiber Communication Line	X			
Kaweah No. 2 Powerhouse to Kaweah No. 2 Forebay Fiber Communication Line	X			
Kaweah No. 3 Powerhouse to Kaweah No. 3 Forebay Fiber Communication Line	X			
Kaweah No. 3 Forebay to Kaweah No. 3 Forebay Inlet Fiber Communication Line	X			
Stream Gages				
East Fork Kaweah River Conduit 1 at Power Plant near Hammond CA (USGS Gage No. 11208800) (SCE Gage No. 200a)	X			
East Fork Kaweah River near Three Rivers CA (USGS Gage No. 11208730) (SCE Gage No. 201)	X			
Kaweah No. 1 Minimum Instream Flow Release (SCE Gage No. 201a)	X			
East Fork Kaweah River Conduit 1 near Three Rivers CA (SCE Gage No. 202)	X			
Kaweah River below Conduit No. 2 near Hammond CA (USGS Gage No. 11208600) (SCE Gage No. 203)	X			
Kaweah River Conduit No. 2 near Hammond CA (SCE Gage No. 204a)	X			
Kaweah River Conduit No. 2 at Power Plant near Hammond CA (USGS Gage No. 11208818) (SCE Gage No. 205a)	X			

Table TERR 2-1. Project Facilities and Relationship to FERC Project Boundary.

Project Facility	Within FERC Project Boundary	Portion of Facility Outside FERC Project Boundary		
		Entirely on Private Property	Partially on Private Property	Partially on NPS Property
Stream Gages (continued)				
Middle Fork Kaweah River Conduit No. 3 at Power Plant near Hammond CA (USGS Gage No. 11208565) (SCE Gage No. 206a)	X			
Project Access Roads				
Kaweah No. 1 Development				
Kaweah No. 1 Flowline Access Road – Bear Canyon	X		X	
Kaweah No. 1 Flowline Access Road – Grapevine	X			
Kaweah No. 1 Flowline Access Road – Lower Pine	X			
Kaweah No. 1 Flowline Access Road – Lumberyard	X			
Kaweah No. 1 Flowline Access Road – Slick Rock	X		X	
Kaweah No. 1 Flowline Access Road – Summit	X			
Kaweah No. 1 Flowline Access Road – Unnamed	X		X	
Kaweah No. 1 Flowline Access Road – Upper Pine	X			
Kaweah No. 1 Forebay Road	X			
Kaweah No. 1 Intake Road	X		X	
Kaweah No. 2 Development				
Kaweah No. 2 Flowline Access Road – Canal 2 Brushout Grid	X		X	
Kaweah No. 2 Flowline Access Road – Canal 4 East	X		X	
Kaweah No. 2 Flowline Access Road – Canal 4 West	X		X	
Kaweah No. 2 Flowline Access Road – Canal 5	X		X	
Kaweah No. 2 Flowline Access Road – Canal 6 East	X		X	
Kaweah No. 2 Flowline Access Road – Canal 6 West	X		X	
Kaweah No. 2 Flowline Access Road – Flume 8	X			
Kaweah No. 2 Flowline Access Road – Flume 11	X		X	
Kaweah No. 2 Flowline Access Road – Open Siphon Grids	X			
Kaweah No. 2 Flowline Access Road – Red Barn	X		X	
Kaweah No. 2 Flowline Center Access Road	X		X	
Kaweah No. 2 Flowline East Access Road	X			
Kaweah No. 2 Flowline West Access Road	X		X	
Kaweah No. 2 Forebay Road	X			
Kaweah No. 2 Intake Road	X			X

Table TERR 2-1. Project Facilities and Relationship to FERC Project Boundary.

Project Facility	Within FERC Project Boundary	Portion of Facility Outside FERC Project Boundary		
		Entirely on Private Property	Partially on Private Property	Partially on NPS Property
Project Access Roads (continued)				
Kaweah No. 2 Development (continued)				
Kaweah No. 2 Penstock Road	X			
Kaweah No. 2 Powerhouse Road	X			
Kaweah No. 3 Development				
Kaweah No. 3 Forebay Road	X		X	
Kaweah No. 3 Powerhouse Road	X			
Project Trails				
Kaweah No. 1 Development				
Kaweah No. 1 Flowline Access Trail – Grand Canyon	X		X	
Kaweah No. 1 Solar Panel Access Trail		X		
Kaweah No. 2 Development				
Kaweah No. 2 Flowline Access Trail – Canal 11	X		X	
Kaweah No. 2 Flowline Access Trail – Canal 13	X			
Kaweah No. 2 Flowline Access Trail – Canal 15	X			
Kaweah No. 2 Flowline Access Trail – Canal 2	X			
Kaweah No. 2 Flowline Access Trail – Canal 4	X			
Kaweah No. 2 Flowline Access Trail – Canal 5	X			
Kaweah No. 2 Flowline Access Trail – Canal 6	X			
Kaweah No. 2 Flowline Access Trail – Open Siphon	X			
Kaweah No. 2 Flowline Access Trail – Water User 14	X			
Kaweah No. 2 Flowline Access Trail – Water User 9	X		X	
Kaweah No. 2 Flowline Access Trail – Wildlife Crossing 2	X			
Kaweah No. 2 Powerhouse River Access Trail	X			
Kaweah No. 3 Development				
Kaweah No. 3 Flowline Access Trail	X			
Ancillary and Support Facilities				
Kaweah No. 1 Forebay Tank Repeater	X			
Kaweah No. 1 Powerhouse Campus	X			
Kaweah No. 1 Diversion Intake House Solar Panel		X		
Kaweah No. 1 Solar Yard Satellite Repeater		X		

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Project Facility	Within FERC Project Boundary	Portion of Facility Outside FERC Project Boundary		
		Entirely on Private Property	Partially on Private Property	Partially on NPS Property
Ancillary and Support Facilities (continued)				
Kaweah No. 1 Grapevine Satellite Repeater	X			
Kaweah No. 2 Powerhouse River Access Parking	X			
Kaweah No. 2 Wildlife Bridges	X			
Kaweah No. 2 Wildlife Escape Ramps	X			
Kaweah No. 2 Footbridges	X			
Kaweah No. 3 Wildlife Bridges	X			
Kaweah No. 3 Wildlife Escape Ramps	X			
Kaweah No. 3 Footbridges	X			

Notes:

Property jurisdiction based on multiple sources. Some data has been modified to account for known errors.

Sources:

1. FERC boundary Exhibit G sheets obtained from SCE (Dec. 2014). Sheets filed with FERC in 2009; Sheets 4-6 updated and filed with FERC 2012.
2. Digital FERC boundary obtained from SCE but heavily modified to account for known errors (Dec. 2014)
3. Digital parcel boundary for Tulare County purchased from OGInfo.com LLC (May 2015)
Parcel Vintage: 02/12/2013
Attribute Vintage: 02/17/2015

Table TERR 2-2. Survey Area for Special-Status Plant and Non-Native Invasive Plants.

Project Facility	Survey Area¹
Diversion Dams and Pools	15 feet around the perimeter
Flowlines ²	20 feet on either side
Forebays/Forebay Tank	20 feet around the perimeter
Penstocks	15 feet on either side
Powerhouses and Switchyards	Within and up to 15 feet around the perimeter fence
Transmission, Power, and Communication Lines	25 feet on either side
Gages	10 feet around gages
Project Access Roads	20 feet on either side
Project Trails	15 feet on either side
Ancillary and Support Facilities	
Kaweah No. 1 Powerhouse Campus	Within the developed campus
Repeaters and Solar Panels	15 feet around the perimeter
River Access Parking	10 feet around parking area and beach

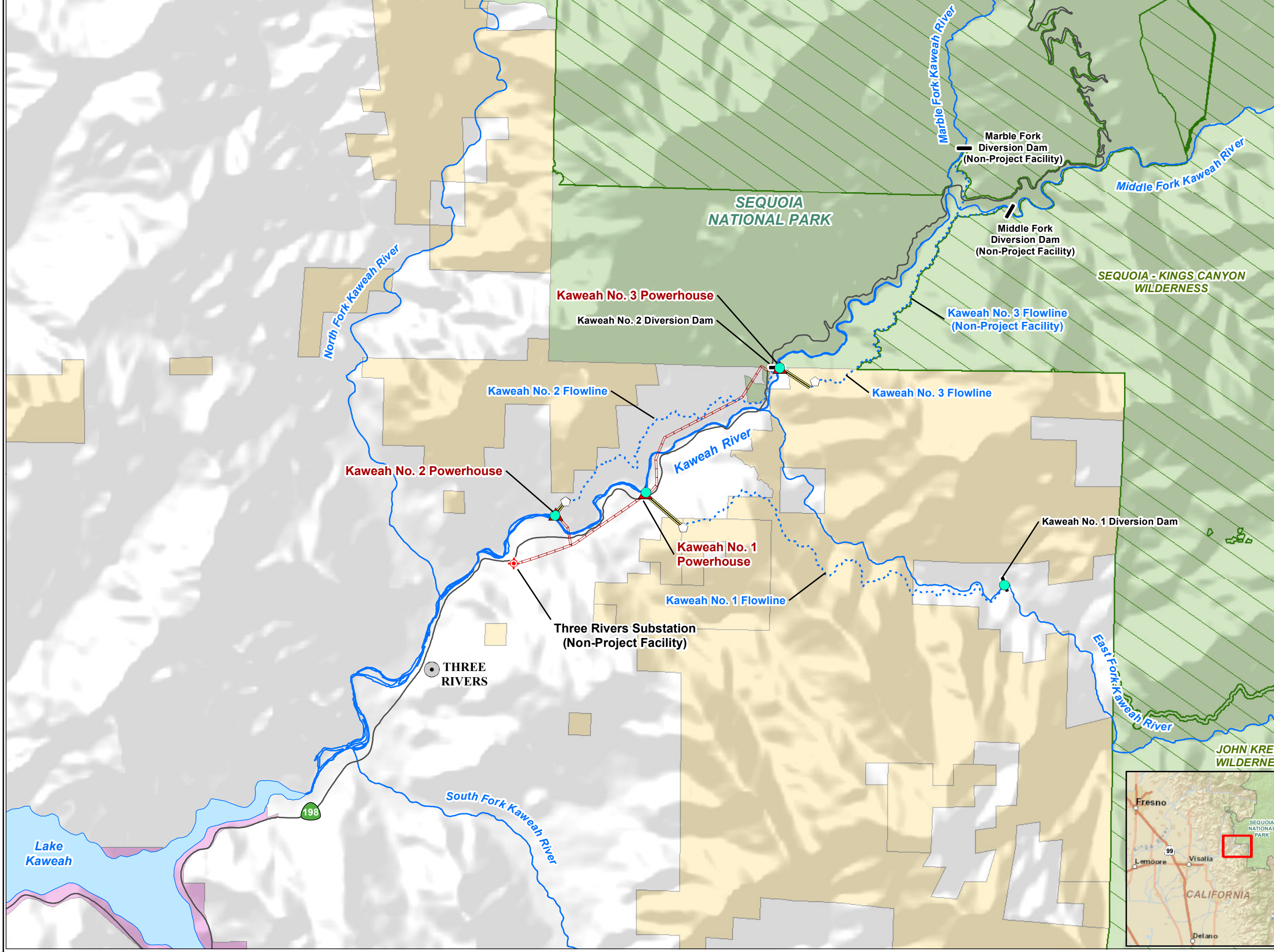
¹Survey areas represent locations where potential operation and maintenance activities occur.

²Footbridges, wildlife bridges, and wildlife escape ramps are located on Project flowlines and will be surveyed concurrently with the flowlines.

Table TERR 2-3. Special-Status Bat Roost Reproductive Survey Locations.


Diversion Dams and Pools
Kaweah No. 1 Diversion Dam and Pool (East Fork Kaweah River)
Kaweah No. 2 Diversion Dam and Pool (Kaweah River)
Flowlines
Kaweah No. 1 Flowline (flume section only)
Kaweah No. 2 Flowline (flume section only)
Powerhouses and Switchyards
Kaweah No. 1 Powerhouse and Switchyard
Kaweah No. 2 Powerhouse and Switchyard
Kaweah No. 3 Powerhouse and Switchyard
Stream Gages
East Fork Kaweah River Conduit 1 at Power Plant near Hammond CA (USGS Gage No. 11208800) (SCE Gage No. 200a)
East Fork Kaweah River near Three Rivers CA (USGS Gage No. 11208730) (SCE Gage No. 201)
Kaweah No. 1 Minimum Instream Flow Release (SCE Gage No. 201a)
East Fork Kaweah River Conduit 1 near Three Rivers CA (SCE Gage No. 202)
Kaweah River below Conduit No. 2 near Hammond CA (USGS Gage No. 11208600) (SCE Gage No. 203)
Kaweah River Conduit No. 2 near Hammond CA (SCE Gage No. 204a)
Kaweah River Conduit No. 2 at Power Plant near Hammond CA (USGS Gage No. 11208818) (SCE Gage No. 205a)
Middle Fork Kaweah River Conduit No. 3 at Power Plant near Hammond CA (USGS Gage No. 11208565) (SCE Gage No. 206a)
Ancillary and Support Facilities
Kaweah No. 1 Powerhouse Campus
Kaweah No. 2 Wildlife Bridges
Kaweah No. 2 Wildlife Escape Ramps
Kaweah No. 2 Footbridges
Kaweah No. 3 Wildlife Bridges
Kaweah No. 3 Wildlife Escape Ramps
Kaweah No. 3 Footbridges

MAPS



- Facilities**
- Powerhouse
 - Diversion
 - Utility
 - Forebay
 - Flowline
 - Penstock
 - Transmission Line
- Other Features**
- Major City/Town
 - Highway
 - Watercourse
 - Water Body
- Land Jurisdiction***
- Bureau of Land Management
 - U.S. Army Corps of Engineers
 - National Park Service
 - Private
- Land Management**
- National Wilderness Area
- Terrestrial**
- Bat Sampling Location

*SOURCE: BLM 2012




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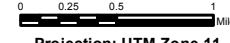
Eastern Hydro Generation

Map TERR 2-1

Special-Status Bat Acoustics and Mist Net Sampling Locations



Date: 12/9/2015



Projection: UTM Zone 11
Datum: NAD 83

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CALVEG Vegetation Alliances*

- Barren (BA)
- Chamise Alliance (CA)
- Ceanothus Chaparral Alliance (CC)
- Wedgeleaf Ceanothus Alliance (CL)
- Lower Montane Mixed Chaparral Alliance (CQ)
- Whiteleaf Manzanita Alliance (CW)
- Upper Montane Mixed Chaparral Alliance (CX)
- Annual Grasses and Forbs Alliance (HG)
- Perennial Grasses and Forbs Alliance (HM)
- Incense Cedar Alliance (MD)
- Mixed Conifer-Pine Alliance (MP)
- Riparian Mixed Hardwood Alliance (NR)
- Interior Mixed Hardwood Alliance (NX)
- Canyon Live Oak Alliance (QC)
- Blue Oak Alliance (QD)
- White Alder Alliance (QE)
- California Buckeye Alliance (QI)
- Black Oak Alliance (QK)
- California Sycamore Alliance (QP)
- Interior Live Oak Alliance (QW)
- Soft Scrub-Mixed Chaparral Alliance (SQ)
- Chaparral Yucca Alliance (SY)
- Willow (Shrub) Alliance (WL)
- Birchleaf Mountain Mahogany Alliance (WM)

*CALVEG Data (Updated May, 2014)

SCE Facilities

- Powerhouse
- Diversion
- Forebay
- Flowline
- Penstock
- Transmission Line
- FERC Boundary

Other Features

- City/Town
- Highway/Road
- Watercourse
- Water Body

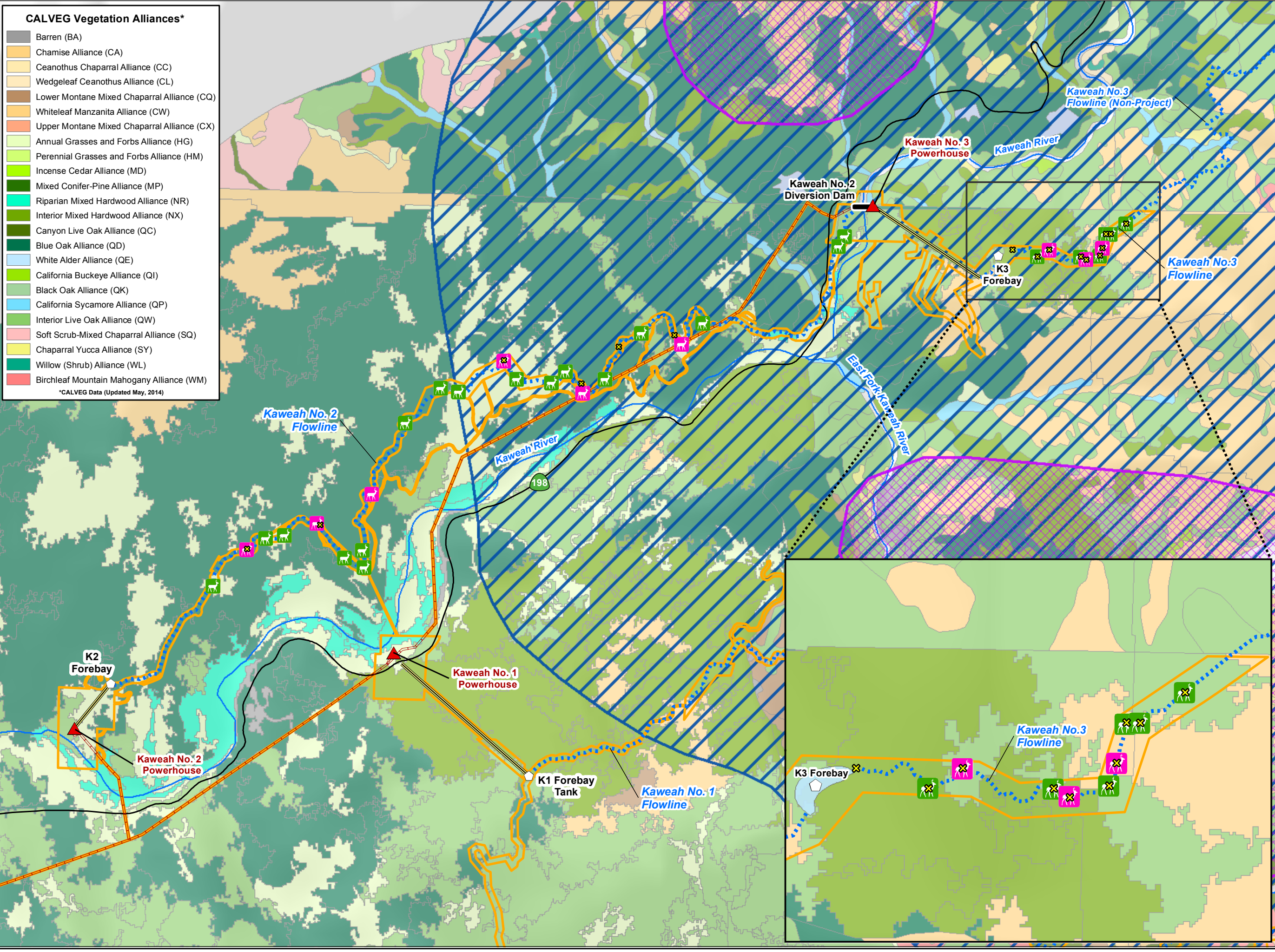
Wildlife Features*


- Wildlife Bridge
- Wildlife Bridge Monitoring Locations
- Wildlife Escape Ramp

*All escape ramps are equipped with hazers and flashers

Deer Range

- Key Winter Range
- Important Winter Range





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Eastern Hydro Generation

Map TERR 2-2

Wildlife Bridge

Monitoring Locations



 0 0.05 0.1 0.2 Miles

 Projection: UTM Zone 11

 Datum: NAD 83

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