



STATE OF CALIFORNIA  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

TEMPORARY PERMIT FOR  
DIVERSION AND USE WATER

APPLICATION T032581

TEMPORARY PERMIT 21365

Permittee: Yolo County Flood Control and Water Conservation District  
34274 State Highway 16  
Woodland, CA 95695-9371

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the Permittee in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this temporary permit dates from **January 28, 2016**. This temporary permit is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated July 6, 2012. The State Water Board has delegated to the Deputy Director for the Division of Water Rights the authority to act on applications for temporary permits pursuant to chapter 6.5 (commencing with section 1425) of part 2 of division 2 of the Water Code if there are no outstanding objections. (State Water Board Resolution 2012-0029, para. 4.2.14.)

The Yolo County Flood Control and Water Conservation District (Applicant or Permittee) filed Application T032581 to appropriate water by temporary permit on January 28, 2016, pursuant to Water Code section 1425 et seq. The Applicant proposes to divert up to 40,000 acre-feet (af), at a maximum rate of 200 cubic feet per second (cfs), from Cache Creek for groundwater recharge (underground storage) in the Yolo and Colusa sub-basins for later irrigation use. Diversions would only occur from January 1 through April 30, and infiltration would occur within the Applicant's existing 160-mile canal system, most of which is unlined, and on up to 50,000 acres of agricultural fields within its service area. Water stored underground would be extracted by overlying well-owners for irrigation use within the Applicant's service area (up to 100,000 acres) during the 2016 irrigation season.

The Applicant manages an extensive groundwater monitoring program within its service area, used to track fluctuations in the water table and develop a more accurate groundwater model for the District. Users in the Applicant's service area extract substantial volumes of groundwater for irrigation. The volume of annual use varies depending on surface water deliveries and crop types but exceeds the amount requested under the application in most years. The District will put the amounts requested for underground storage under this temporary permit to use during the 2016 irrigation season following issuance of this permit.

The State Water Board may issue a temporary permit in advance of the notice required by the Water Code. (Wat. Code § 1428.) A public notice of Application T032581 is pending.

Ordinarily, the State Water Board must comply with any applicable requirements of the California Environmental Quality Act (CEQA) prior to issuance of a temporary permit pursuant to Water Code section 1425 et seq. However, on November 13, 2015, Governor Edmund G. Brown Jr. issued Executive Order B-36-15, which concluded that strict compliance with CEQA would prevent, hinder or delay the mitigation of the effects of the ongoing drought. Item 6 of the Executive Order suspends CEQA for purposes of carrying out the directives in the order, including the issuance of temporary permits to capture high precipitation events for local storage or recharge. Item 2 of the Executive Order requires the State Water Board to prioritize temporary water right permits to accelerate approvals for projects that enhance the ability of a local or state agency to capture high precipitation events this winter and spring for local storage or recharge, consistent with water rights priorities and protections for fish and wildlife. The CEQA suspension applies to any actions taken by state agencies, and for actions taken by local agencies where the state agency with primary responsibility for implementing the directive concurs that

local action is required. The State Water Board concurs that local action by the Applicant is required to implement the directive.

The Applicant filed a Notice of Exemption (NOE) for this project on January 27, 2016. The Applicant determined that the project is exempt from CEQA based on the CEQA suspension described above. The State Water Board has reviewed the information submitted by the Applicant and has made an independent finding that the proposed project is consistent with the suspension of CEQA in Executive Order B-36-15. The State Water Board will issue an NOE for the proposed project within five days of issuance of the temporary permit.

The State Water Board has complied with its independent obligation to consider the effects of the proposed project on public trust resources and to protect those resources where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346, 658 P.2d 709].) Before making the findings required by Water Code section 1425, the State Water Board must: a) review available records, files, and decisions which relate to the availability of water from the source at the proposed point of diversion to serve the proposed temporary diversion and use, and which relate to the rights of downstream users; and b) consult with representatives of the Department of Fish and Wildlife (DFW). (Wat. Code, § 1427.) Division staff has reviewed available records, files and decisions relating to the availability of water for the project and the rights of downstream users, and has consulted with representatives from DFW. At the time of issuance of this permit, DFW staff has not proposed additional terms for the protection of fish and wildlife.

The State Water Board finds that, subject to the terms and conditions included in this temporary permit: (1) the Applicant has an urgent need for the proposed diversion and use of water; (2) the water may be diverted and used without injury to any lawful user of water; (3) the water may be diverted and used without unreasonable effect upon fish, wildlife, or other instream beneficial uses; and (4) the proposed diversion and use is in the public interest. (Wat. Code, § 1425, subd. (b).)

This temporary permit does not create a vested right, even of a temporary nature. (Wat. Code, § 1430.) This temporary permit is not precedential to future permitting actions for this or other similar projects.

### **The Applicant Has an Urgent Need for the Water**

The State Water Board finds that the Applicant has an urgent need for the water proposed to be diverted and used. Four years of state-wide drought have caused substantial depletion of the state's water reserves in above-ground reservoirs and underground aquifers. Reduced surface water deliveries to the Applicant's customers over the past four years due to drought have resulted in increased pumping from the underlying Yolo and Colusa sub-basins, drawing down the average water table depth to the lowest levels since 1978. Declines of more than ten feet have been observed from 2014 to 2015, and the water table in certain areas has dropped below the reach of some wells. The Yolo sub-basin has been designated a high-priority basin by the Department of Water Resources (DWR) because of the total number of wells, the high proportion of land used for irrigated agriculture, and high reliance on groundwater in the area. The Colusa sub-basin has been designated a medium priority basin; it also supports a high proportion of land used for irrigated agriculture, but the region has fewer wells and is less reliant on groundwater overall.

The Applicant proposes to divert water resulting from winter precipitation, when downstream water right holders are satisfied and water quality standards in the Delta are met. Current meteorological predictions indicate a high likelihood of major winter storms driven by the warming trend in the Pacific Ocean known as El Niño. Given the preceding four years of drought that have depleted groundwater reserves in the area, the Applicant has demonstrated an urgent need to divert and use the water.

### **The Water May Be Diverted and Used Without Injury to Any Lawful User of Water**

The water will be diverted and used without injury to any lawful user. This temporary permit limits diversions to an instantaneous rate and a total volume. The permit conditions diversions on maintenance of a minimum bypass

flow that is protective of downstream users and fish and wildlife, and conditions diversions on attainment of water quality standards in the Delta.

Injury to downstream users on Cache Creek: Downstream of the point of diversion until the USGS gage 11452500 on Cache Creek at Yolo (Yolo Gage), Cache Creek is a permeable, losing reach, and water levels in nearby groundwater wells are closely correlated to flow in the reach. Based on infiltration rate estimates from a 1962 United States Geological Survey study, State Water Board Revised Water Right Decision 1641 (Revised D-1641) states that percolation losses along Cache Creek downstream of Capay Dam amount to 200 cfs. Preliminary analysis by the Applicant and by State Water Board staff indicate this value may not be accurate during the proposed season of diversion. There are also two riparian claims (Statement S015676 of Howald Farms and Statement S01593 of Payne Farms) downstream of Capay Diversion Dam (Capay Dam) and upstream of the Yolo Gage, with a combined maximum diversion capacity of 12.3 cfs.

To protect downstream groundwater and riparian users, the Applicant proposes bypassing a minimum of 20 cfs at the Capay Dam and maintaining a minimum 20 cfs flow at the Yolo Gage. According to the Applicant, it takes water approximately six hours to flow from Capay Dam to Yolo Gage. Due to the uncertainty of the effects of diversions during the proposed season on groundwater recharge within the channel downstream of the Capay Dam and the time lag between the point of diversion and the Yolo Gage, the permit terms include a 30 cfs buffer for the bypass proposed by the Applicant. This permit requires that the Permittee bypass 50 cfs measured at the Yolo Gage. Registering flow at the Yolo Gage indicates that flows downstream of Capay Dam are sufficient to fulfill riparian demand and recharge the local sub-basin upon which downstream groundwater users rely.

The bypass terms of the temporary permit, while protective of other legal users, should not be interpreted as restricting the Applicant to only diverting during high stream flow events. The bypass terms may result in the Applicant diverting a significant portion of the available stream flow at the point of diversion, while acknowledging that the Applicant's rate of diversion is limited to 200 cfs.

Injury to downstream users in the Yolo Bypass: The Yolo Bypass (Bypass) receives flow from Cache Creek, the Sacramento River, Knights Landing Ridge Cut, Willow Slough, Putah Creek, Cache Slough and Prospect Slough. Cache Creek is separated from the Bypass by the Cache Creek Settling Basin (Settling Basin) near the City of Woodland. During high flow events in the Sacramento River, excess water is shunted into the Bypass for flood control; however, the Bypass also supports irrigated agriculture, managed wetlands, and other beneficial uses of water. From State Water Board records, estimates of legal demand in the Cache Creek Settling Basin and the Bypass downstream of its confluence with Cache Creek are as high as 334 cfs between January 1 and March 31, and as high as 812 cfs from April 1 to April 30. The Applicant has consulted with Conaway Preservation Group, LLC (Conaway), whose rights constitute 310 cfs of the estimated 812 cfs demand during the month of April. According to the Applicant, Conaway has consented to the project as proposed in the temporary permit application and thus their diversion is not included in the injury analysis used to calculate the bypass restriction. The Deputy Director of the Division of Water Rights retains the authority to modify terms and conditions if the party later asserts injury.

At low flows, Cache Creek terminates in the Settling Basin, where water eventually evaporates or infiltrates into the ground. During higher flows and when the Settling Basin fills, water spills into the Bypass and drains, less natural losses, into the Tule Canal, the primary channel within the Bypass. When Cache Creek flow is high enough to establish hydraulic continuity with the Tule Canal, the proposed diversion may injure senior rights located within the Bypass. According to a comparative analysis of Cache Creek flows at the Settling Basin to flows at USGS Gage 11453000 at Yolo Bypass near Woodland (Woodland Gage), which measures flow in the Tule Canal near its confluence with Cache Creek, Cache Creek contributes approximately 20 percent of flow in the Tule Canal at the Woodland Gage. To protect senior rights in the Bypass when Cache Creek is hydraulically connected to the Tule Canal, diversions under this permit may only occur when the flow at the Yolo Gage is at least 20 percent of estimated downstream demand in the Bypass (i.e., 68 cfs between January 1 and March 31, and 101 cfs between April 1 and April 30).

Under certain conditions, inflow into the Bypass from sources other than Cache Creek is sufficient to satisfy demand in the Bypass. In years in which flows from the Sacramento River spill into the Bypass at the Fremont Weir, flow contributions from the Sacramento River are several degrees of magnitude higher than runoff from the smaller tributaries, including Cache Creek, and substantially higher than total demand in the Bypass. Similarly, when flows from other tributaries to the Bypass are higher than Bypass demand, the proposed diversion would not injure users in the Bypass. When the Fremont Weir is spilling, or when flow at the Woodland Gage exceeds 1000 cfs, all legal demand in the Bypass will be fulfilled.

Injury to downstream users in the Sacramento River and Sacramento - San Joaquin Delta (Delta): Because Cache Creek is tributary to the Sacramento River, there is potential for diversions pursuant to the temporary permit to injure the State Water Project and the Central Valley Project (Projects), operated by DWR and the U.S. Bureau of Reclamation (USBR), respectively. During "excess conditions," Delta inflow is greater than that necessary to meet water quality standards. When natural flows to the Delta are insufficient to meet water quality standards, the Projects release supplemental, stored water to meet Delta water quality objectives. In times of lower flows in the Sacramento and San Joaquin Rivers, diversions under the temporary permit may impact water quality in the Delta.

The Applicant consulted with staff from DWR and USBR, who indicated they would not be injured if diversions under the temporary permit occurred at times when the Delta is in excess condition or when there is a lack of hydraulic continuity with the Delta. The Delta is currently in excess condition. To protect Sacramento River and Delta water users subject to Term 91, the State Water Board will require the Applicant to comply with Term 91 and reserves the authority to immediately reduce or halt diversions under this temporary permit in light of any indication of injury to downstream users. The Temporary Permit also prohibits diversions unless the Delta is in excess conditions when Cache Creek is hydraulically connected to the Bypass. While Revised D-1641 excluded the Cache Creek watershed from curtailing diversions under Term 91, this temporary permit allows diversions in circumstances different from those contemplated in Revised D-1641. The proposed diversion season under this temporary permit is largely outside the irrigation season, when the Applicant's pre-1914 rights are generally exercised. In addition, Delta water quality objectives are more likely to be unmet because of the impacts of the preceding four years of drought.

The State Water Board has reviewed available records, files, and decisions relating to the availability of water for the project and has determined that Permit conditions will prevent injury to downstream lawful users. The State Water Board will require the Permittee to comply with these limitations as conditions of this permit.

### **The Water May Be Diverted and Used Without Unreasonable Effects upon Fish, Wildlife, or Other Instream Beneficial Uses**

The diversion and use of water under this temporary permit will not have unreasonable effects upon fish, wildlife, or other instream beneficial uses within the watershed. The permit authorizes diversions only when flows are sufficiently high to meet both the needs of fish, wildlife and other instream resources, and the demands of downstream right-holders. The Permittee intends to bypass peak flows because of the water quality conditions, which will allow localized inundation of riparian habitat and general channel formation. Lower Cache Creek is not known to currently support any special-status aquatic species. The State Water Board can adjust the terms and conditions of a temporary permit at any time in light of new information. The Applicant has consulted with DFW staff on the project's potential for impacts to fish and wildlife. At the time of issuance of this permit, DFW staff has not proposed additional terms for the protection of fish and wildlife.

Inundating undeveloped lands or sensitive habitat for use as infiltration areas could impact special status species. This permit contains a term to restrict inundation to actively farmed, developed lands within the Permittee's service area.

**The Proposed Diversion and Use Is in the Public Interest**

The proposed diversion, storage, and use of water are in the public interest. Capture and storage of flows that would otherwise be unused will mitigate effects of the current drought on water supplies for agriculture, businesses, communities, and fish and wildlife. Augmentation of groundwater supplies will enhance local drought resiliency, particularly after several years of severe drought. The California Natural Resource Agency’s California Water Action Plan, originally released in 2014 and updated in 2016, calls for increased regional self-reliance and integrated water management, including conjunctive use of groundwater and surface water supplies.

The proposed diversion is a pilot project to demonstrate the feasibility of projects that use available winter precipitation events to recharge local groundwater. If successful, the proposed project may provide the basis for a standard permit application by the Permittee to divert water from winter precipitation events to underground storage for use within the water suppliers’ service area.

**Permittee is hereby authorized to divert and use water as follows:**

1. Source of water: Cache Creek  
tributary to: Yolo Bypass thence the Sacramento River thence the Pacific Ocean  
within the County of **Yolo**.
2. Location of point of diversion to underground storage and infiltration areas.

By California Coordinate System of 1983 in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)	Township	Range	Base and Meridian
<b>Capay Diversion Dam</b> <b>North 2,021,690 feet and East 6,537,478 feet</b>	<b>NE ¼ of SE ¼</b>	<b>16</b>	<b>10N</b>	<b>2W</b>	<b>MD</b>
<b>Infiltration Areas</b>	Within the Yolo County Flood Control and Water Conservation District service area boundary as shown on map filed with the State Water Board and supplemented by Term 0100500.				

3. Purpose of use	4. Place of use
<b>Irrigation</b>	Up to 100,000 acres within the Yolo County Flood Control and Water Conservation District service area boundary as shown on map filed with the State Water Board.

The infiltration areas and place of use are shown on map filed on January 28, 2016, with the State Water Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed **40,000 acre-feet** by diversion to underground storage to be collected from January 1 to April 30. The maximum rate of diversion from Cache Creek shall not exceed **200 cubic feet per second**. This permit expires **180 days** from the date of its issuance, but may be renewed by the board.  
(0000005C, 0000005J, 0510700)
6. Prior to diversion of water under this permit, Permittee shall submit for approval by the Deputy Director for Water Rights a plan for measurement and accounting of water diverted to underground storage and extracted for beneficial use. If water diverted to underground storage will be extracted by persons other than the Permittee, the plan shall set forth how the Permittee will quantify extraction and use, and determine that the extractions are from water stored by the Permittee and not based on other claims of right. The plan shall be implemented as approved by the Deputy Director.

(0089999)

7. No water shall be diverted under this temporary permit unless the Permittee monitors and records the rate of diversion and quantity of water diverted to underground storage under this temporary permit. Permittee shall use a measuring device or other method satisfactory to the Deputy Director for Water Rights. The device or method shall be capable of quantifying the daily rate and volume of diversion and shall be properly maintained.

Permittee shall provide the Division of Water Rights with current photographs of the device or method installed with certification that it is properly installed, calibrated and operating as designed. The photograph and certification shall be filed with the summary report required by Term 0100500.

Permittee shall maintain a daily record of the volume of water diverted, and the maximum daily rate of water diverted. If Permittee is using the point of diversion under other rights, the record of diversion shall be separately quantified. A copy of the daily records shall be submitted with the report required by Term 0100500 or whenever requested by the Division of Water Rights.

(0109999)

8. For the purposes of payment of fees associated with diversions greater than 10,000 acre-feet, Permittee shall submit additional fees pursuant to California Code of Regulations, title 23, section 1062(a)(1)(E) within 30 days of actual diversion over 10,000 acre-feet. The fees shall be accompanied by a report of the amount actually diverted.

(9999999)

9. Permittee shall submit a report to the State Water Board within 60 days after the expiration of this permit. The report shall include the total quantity of water diverted under this temporary permit and any other amounts diverted from the point of diversion under other bases of right during the reporting period, the quantity of water applied to beneficial use, and a map of the location and acreage of fields used for infiltration. The report shall also include records of the daily quantity and the maximum rate of diversion as described in Term 0109999 and the corresponding daily mean flow as recorded at the USGS gage 11452500 on Cache Creek near Yolo (Yolo Gage), the USGS gage 11452800 at Settling Basin, and the DWR Fremont Weir Gage and USGS gage 11453000 at Yolo Bypass near Woodland as appropriate to document compliance with Terms 0000204 and 0360899.

(0100500)

10. No water shall be diverted under this permit, unless the flow in Cache Creek is at or above 50 cubic feet per second, as measured at the USGS Gage 11452500 (Cache Creek at Yolo [Yolo Gage]) as a mean daily average.

(0000204)

11. The Permittee shall monitor daily the USGS Gage 11452800 (Cache Creek Overflow Weir from Settling Basin [Settling Basin Gage]) and whenever this Gage reading reaches 34.2 feet or other information indicates that Cache Creek and the Yolo Bypass would be hydraulically connected absent diversion under this permit, no water shall be diverted under this permit unless:
- a. From January 1 through March 31, 68 cubic feet per second, or more is measured at the Yolo Gage, and from April 1 through April 30, 101 cubic feet per second or more is measured at the Yolo Gage; or
  - b. The river stage measured at the Sacramento River at Fremont Weir Gage is above 33.5 feet or the flow measured at USGS gage 11453000 (Yolo Bypass near Woodland) is at or above 1,000 cubic feet per second.

Hydraulic continuity between Cache Creek and the Yolo Bypass shall be calculated on a daily basis. In the event that any of the gages or monitoring devices is no longer available for streamflow measurements, the Permittee shall immediately notify and consult with the Deputy Director for Water Rights regarding the substitute gage or gages to be used to determine the appropriate minimum flow requirements.

(0360899)

12. No diversion is authorized by this permit when satisfaction of inbasin entitlements requires release of supplemental Project water by the Central Valley Project (CVP) or the State Water Project (SWP).
- a. Inbasin entitlements are defined as all rights to divert water from streams tributary to the Sacramento-San Joaquin Delta or the Delta for use within the respective basins of origin or the Legal Delta, unavoidable natural requirements for riparian habitat and conveyance losses, and flows required by the State Water Board for maintenance of water quality and fish and wildlife. Export diversions and Project carriage water are specifically excluded from the definition of inbasin entitlements.
  - b. Supplemental Project water is defined as that water imported to the basin by the projects plus water released from Project storage which is in excess of export diversions, Project carriage water, and Project inbasin deliveries.

The State Water Board shall notify Permittee of curtailment of diversion under this term after it finds that supplemental Project water has been released or will be released. The Board will advise Permittee of the probability of imminent curtailment of diversion as far in advance as practicable based on anticipated requirements for supplemental Project water provided by the Project operators.

(0000091)

13. Whenever the Settling Basin Gage reading reaches 34.2 feet or other information indicates that Cache Creek and the Yolo Bypass would be hydraulically connected absent diversion under this permit, no water shall be diverted under this permit unless the Delta is in excess conditions. Permittee shall monitor daily the CVP-SWP Coordinated Operation Agreement to determine whether the Delta is in balance conditions or excess conditions.

(0360898)

14. The Permittee must cease diversions at the direction of the Deputy Director for Water Rights. The Deputy Director will direct the Permittee to cease diversions upon a finding that the conditions described in Term 0000091 are likely to occur; the diversion threatens to injure downstream senior right holders; or the diversion creates a threat to human health or safety.

(0359999)

15. Water applied for infiltration outside of the Permittee's existing canal system shall only be applied to previously irrigated and developed agricultural fields.

(0400500)

16. The State Water Board may supervise diversion and use of water under this temporary permit for the protection of lawful users of water and instream beneficial uses and for compliance with permit conditions. Permittee shall allow representatives of the State Water Board and other parties, as may be authorized from time to time by the State Water Board, reasonable access to project works to determine compliance with the terms of this temporary permit.

(0480600)

17. This temporary permit is issued and Permittee takes it subject to California Water Code, Division 2, Chapter 6.5, section 1425 et seq. Any temporary permit issued under this chapter shall not result in creation of a vested right, even of a temporary nature, but shall be subject at all times to modification or revocation at the discretion of the State Water Board.  
(0510800)
18. Issuance of this temporary permit shall not be construed as indicating State Water Board approval of water right permits requested under other applications.  
(0510999)
19. Permittee shall promptly submit any reports, data, or other information that may reasonably be required by the State Water Board, including but not limited to documentation of water diversion and documentation of compliance with the terms and conditions of this temporary permit.  
(0000010)
20. No water shall be diverted or used under this temporary permit unless Permittee has obtained and is in compliance with all necessary permits or other approvals required by other agencies.  
(0000203)
21. This temporary permit does not authorize any act which results in the taking of a candidate, threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. § 1531 et seq.). If a "take" will result from any act authorized under this temporary permit, Permittee shall obtain any required authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this temporary permit.  
(0000014)

STATE WATER RESOURCES CONTROL BOARD

ORIGINAL SIGNED BY:

*Barbara Evoy, Deputy Director*  
*Division of Water Rights*

Dated: FEB 03 2016