

Technical Guidance

Water Code 1242.1 - Flood Diversions for Groundwater Recharge

This document provides technical guidance on a recently enacted pathway for parties to divert surface water to help alleviate flooding while also recharging California's depleted groundwater basins. Please note the responses to these questions have been highly simplified to summarize complex issues and should not be considered formal or legal guidance. This document may be updated periodically. If you have a question not addressed here, please contact FloodDiversion@waterboards.ca.gov.

General Questions

What is Water Code section [1242.1](#)?

On July 10, 2023, Senate Bill 122 added section 1242.1 to the California Water Code (Section 1242.1) with the dual purpose of managing floods and expediting the restoration of the State's groundwater levels. Section 1242.1 creates a pathway that can be used during extreme flood events that allows for diversion of flood water without a water right. These diversions can have dual benefits: reducing flood risks and impacts, while at the same time recharging groundwater aquifers. Section 1242.1 includes reporting requirements and other protective conditions that are intended to prevent impacts to sensitive infrastructure, ecosystems, and existing water rights holders.

Can surface water be diverted anywhere or at any time under Water Code section 1242.1?

No, Section 1242.1 establishes limitations on when and where floodflows can be diverted.

What are the general requirements of Water Code section 1242.1?

- Diversions can only occur if a local or regional agency has issued a public notice that flows downstream of the point of diversion are at imminent risk of flooding and inundation of lands, roads, or structures.
- The ability to determine when floods pose an imminent risk must be based off local planning documents. More specifically, the flood determination is based on consideration of flood risk in the agency's most recently adopted local plan of flood control or general plan.
- Diversions must comply with Section 1242.1's specified protective conditions, including noticing and reporting requirements.
- Section 1242.1 expires on January 1, 2029.



Flood Diversion Triggers

Who determines when diversions can begin or end?

Only certain local or regional agencies can determine when flood diversion thresholds are triggered. The agency must have adopted a local plan of flood control pursuant to [Water Code section 8201](#), or have considered flood risk as part of its most recently adopted general plan. Diversions must cease when the agency determines that there is no longer a risk of flooding and inundation of land, roads, or structures downstream of the point of diversion.

In addition to considering flood risks in its local plan of flood control or general plan, what else must the local or regional agency do before it can divert?

The local or regional agency with an appropriate flood plan (not the diverter) must have given notice via its internet website, electronic distribution list, emergency notification service, or another means of public notice that flows downstream of the point of diversion are at imminent risk of flooding and inundation of land, roads, or structures.

How should local entities determine if there is an imminent risk of downstream flooding and inundation of land, roads or structures?

Determinations about the conditions that create an imminent risk must be identified in a local plan of flood control pursuant to [Water Code section 8201](#) or the most recently adopted local general plan. Water Code section 8201 only applies to the urban areas in the Sacramento-San Joaquin Valley ([Water Code section 9602](#)). Most areas of the state will need to use local general plans to document floodflows. Flood managers that need assistance with making a local plan of flood control, or entities interested in adopting flood risk management provisions in a general plan, should contact Department of Water Resources' (DWR) [Flood Management](#).

What does “floodflow” mean, under Section 1242.1?

- Local and federal agencies have developed estimates of when water levels in many rivers and streams pose risks for nearby residents and infrastructure, which in simplified terms is called a “flood stage.” If a waterbody has a defined flood stage, any flow higher than that flood stage would be considered a “floodflow.” Section 1242.1 expresses that concept as: Where a waterbody is subject to a defined flood stage, flows in excess of flood stage that necessitate actions to avoid threats to human health and safety.
- However, not every river or stream in California has a defined flood stage. Section 1242.1 allows for other triggers in such circumstances, and further defines floodflows as: Surface water that has escaped from or is imminently likely to escape from a channel or waterbody causing or threatening to cause inundation of residential or commercial structures, or roads needed for emergency response.
- “Likely imminent escape from a channel or waterbody” is demonstrated by measured flows in excess of the maximum design capacity of a flood control project, where present. Floodflow under this part of Section 1242.1 does not include flows that inundate wetlands, working lands, or floodplains, events that



constitute a “design flood,” groundwater seepage, or waters confined to a “designated floodway.”

- “Imminent” means a high degree of confidence that a condition will begin in the immediate future. When the flood conditions have abated to the point there is no longer a risk of flooding and inundation of land, roads, or structures downstream of the point of diversion, diversions are no longer authorized under Section 1242.1.
- Flows would inundate ordinarily dry areas in the bed of a terminal lake to a depth that floods dairies and other ongoing agricultural activities, or areas with substantial residential, commercial, or industrial development.

Protective Conditions

What protective conditions are in Water Code section 1242.1?

A high-level description of Section 1242.1 protections are bulleted below, with specific scenarios described later in the document. In general:

- Diversions must use either existing diversion infrastructure or temporary pumps.
- If temporary pumps are used, they must use protective screens to minimize impacts to fish and other aquatic life.
- There are limitations on where floodwater can be applied. Floodwater cannot be applied to certain areas associated with animal facilities, where manure or pesticide have recently been applied, and areas that haven’t recently been used for agriculture. Diverters should try to use existing groundwater recharge locations, such as percolation ponds that have already been built. However, other options are available if there are no other existing recharge locations.
- Conditions intended to protect water quality, endangered species, and senior water right holders in the Sacramento-San Joaquin Delta.

If I use a temporary pump, what type of screen do I need for the pump intake?

Diversions using temporary pumps are required to “minimize the impacts of diversion to fish and other aquatic life.” The screens shall:

- be constructed of any rigid material, perforated, woven, or slotted, that provides water passage while physically excluding fish
- be parallel to the flow and adjacent to the water’s edge
- minimize eddies in the transition zones upstream of, in front of, and downstream of the screen
- minimize entrainment to the degree feasible

These requirements can align with a type of screen often referred to as a “trash screen” or “strainer” or a “debris screen.” This type of screen is intended only for diversions under Section 1242.1 and should not be expected to be acceptable for other purposes. Parties should consult directly with the California Department of Fish and Wildlife regarding protective screen requirements for water rights diversions.



Do I need a protective screen to divert 1242.1 floodflows using existing infrastructure?

Section 1242.1 does not place additional requirements for protective screens on existing diversions (other applicable laws or regulations may be in effect and must be observed).

Do I need a screen if I divert from a canal, somewhere behind the initial river diversion?

No. The requirement for a screen applies to the location where water is diverted directly from a river or stream, when using a temporary pump. If using existing infrastructure to divert from a canal, no screen is required to comply with 1242.1 (other applicable laws or regulations may be in effect and must be observed).

I have new permanent infrastructure that was built on or after July 10, 2023. Can I use that diversion structure to divert Section 1242.1 floodflows and does that infrastructure qualify as existing permanent infrastructure under Water Code section 1242.1?

Water Code section 1242.1 allows for use of existing permanent infrastructure, which, for purposes of diversions under that section, may include:

- (1) Permanent infrastructure constructed prior to July 10, 2023; and
- (2) Permanent infrastructure (e.g., diversion structures, recharge locations) constructed for purposes other than diversion under section 1242.1 after July 10, 2023 but prior to initiation of the section 1242.1 diversions, where all applicable regulatory requirements have been complied with, including but not limited to applicable California Environmental Quality Act and Lake and Stream Alteration Agreement requirements.

What limitations are there on the land areas where I recharge water?

The diverted water cannot be applied for recharge to any of the following:

Certain land associated with animal facilities

Barns, ponds, or lands where:

- manure/waste from an animal facility that generates waste from the feeding/housing of animals in a confined area
- operates more than 45 days per year
- is not vegetated

Certain agricultural lands with water quality concerns

Agricultural fields that have been identified as an outlier with respect to nitrogen application by any of the following:

- the State Water Board
- a Regional Water Board
- an agricultural coalition charged with implementation of the Irrigated Lands Regulatory Program



Uncultivated Areas

- Areas not cultivated within the previous three years
- Examples: grazing lands, annual grasslands, natural habitats
- Exceptions (recharge allowed): existing facilities constructed for the purpose of groundwater recharge or managed wetlands

Areas where diversions or recharge could exacerbate the threat of flood or potentially damage:

- critical levees or other infrastructure
- wastewater/drinking water systems
- drinking water wells/supplies

What are the allowable land uses for recharge areas?

- Facilities already constructed for the purpose of groundwater recharge
- Managed wetlands
- Areas actively cultivated or where cultivation occurred within the last three years (so long as none of the prohibitions described above apply)

When can flood diversions occur in the Delta watershed?

Water may only be diverted from tributaries to the Sacramento-San Joaquin Delta when water rights holders are not making releases of stored water or reoperating facilities to provide flow for the purposes of meeting water quality control plan or endangered species requirements in the Delta at the time of the diversion. Parties can monitor the [daily Delta operations summary](#) provided by the DWR to determine the current condition.

For San Joaquin River upstream of Vernalis and tributaries thereto:

A diversion is authorized only when the Delta is in excess water conditions and the Delta is without restrictions. "Excess water conditions" are determined pursuant to the Agreement between the United States of America and the State of California for Coordinated Operation of the Central Valley Project (CVP) and the State Water Project (SWP), as amended. The Delta is "without restrictions" when SWP and CVP Delta operations are not constrained by any non-discretionary requirements, including any requirements for the protection of water quality and endangered species. The diverter shall monitor conditions daily using the Delta Operations Summary report published on the internet website of the Department of Water Resources to determine whether the Delta is in excess conditions without restrictions.

For the Sacramento River and San Joaquin River downstream of Vernalis and tributaries thereto:

A diversion is authorized only when the Delta is in excess water conditions and either (1) the Delta is without restrictions or (2) the Delta is with restrictions but Delta operations are controlled only by requirements for Old and Middle River flows (OMR) or San Joaquin River Inflow-to-Export ratio (SJR I/E). "Excess water conditions" are determined pursuant to the Agreement between the United States of America and the State of California for Coordinated Operation of the Central Valley Project (CVP) and the State Water Project



(SWP), as amended. The Delta is “without restrictions” when SWP and CVP Delta operations are not constrained by any non-discretionary requirements, including any requirements for the protection of water quality and endangered species. The diverter shall monitor conditions daily using the Delta Operations Summary report published on the internet website of the Department of Water Resources to determine whether the Delta is in excess conditions and which restrictions control.

Reporting

How much flood water can I divert?

Section 1242.1 does not set a limitation on the amount of water diverted, however diversion can only occur in compliance with the specified protective conditions and the applicable agency’s notice. Flood diversions must cease immediately when the flood conditions described in the public notice have abated to the point that there is no longer a risk of flooding and inundation of land, roads, or structures downstream of the point of diversion.

Does the diverter get ownership of the water?

No, Section 1242.1 does not create a water right or any right to ownership or control of the diverted water. The diverted surface water goes toward the net benefit of the groundwater basin. If one exists, the groundwater sustainability agency (GSA) may choose to establish a crediting program or individual groundwater pumpers can use the water consistent with pumping rules for overlying and appropriative groundwater rights.

Parties wishing to assert a right to ownership or control of the diverted water will need a water right permit and are encouraged to consider projects using the Board’s [Streamlined Pathway](#) for diversions during flood conditions. These criteria streamline the application process by focusing on diversions when flows exceed thresholds that trigger flood response actions necessary to avoid threats to human health and safety, according to established written flood management protocols adopted by a flood management or emergency response agency.

Do I have to fill out any forms?

Yes. Any entity diverting pursuant to Section 1242.1, must file three reports (notice, preliminary, and final) with the State Water Board.



Are there timelines for submitting the reports?

Yes. The diverter must file with the State Water Board and the applicable GSA all of the following:



- The required **Notice**, at least 48 hours before diverting, if possible, but no later than 48 hours after diversions begin.
- The required **Preliminary Report**, no later than 14 days after diversions begin.
- The required **Final Report**, no later than 15 days after diversions end.

Where can I find the form for submitting reports?

All three reports must be completed using the [fillable form](#) found at the State Water Board's [Flood Recharge Diversions](#) website.

Where do I submit my forms?

Each completed form is emailed to FloodDiversions@waterboards.ca.gov.

How do I get help if I'm unclear about my GIS or APNs for the reports?

The Department of Water Resources maintains a Groundwater Recharge website with tutorials, webinars, and answers to general questions. There is also an online application that can be used to help identify GIS coordinates, APNs, acres, GSA information, and develop a map. Visit DWR's [California Groundwater Recharge Information](#) page for more information.

Other

I'm an interested in finding reporting for my area. Where are reports posted?

Reports submitted to the Board will be posted regularly on the [flood recharge diversions](#) website under the section titled "Diversion Reports Received."

I'm also interested in viewing the public notices of the local or regional agencies. How can I find those documents?

There's no requirement for local/regional agencies to submit their notices to the Board. This information may be available by contacting the applicable agency directly. Notices may be provided by the local or regional agency on its website, electronic distribution list, emergency notification service, or another means of public notice.



Does the State Water Board prepare a summary report of each year's diversions?

Yes, for diversions made pursuant to Section 1242.1 that are initiated prior to January 1, 2029. The State Water Board will annually post a report detailing the number of projects, the estimated amount of water diverted, locations of recharge projects implemented, and any recommendations.

Reports will be posted to the Board's [Flood Recharge Diversions](#) website.

Who do I notify if I believe a diverter is not operating in compliance with the Water Code's conditions?

File a complaint through the [CalEPA Complaint System](#).

What if I have questions not answered here?

If you have additional questions, please contact the State Water Board at: FloodDiversion@waterboards.ca.gov

