

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – OFFICE OF DELTA WATERMASTER
DECEMBER 4, 2012**

ITEM 10

SUBJECT

INFORMATIONAL REPORT ON TERM 91: STORED WATER BYPASS REQUIREMENTS

DISCUSSION

California Water Code Section 85230(d) directs the State's Delta Watermaster (Watermaster) to submit regular reports to the State Water Board on water rights administration, water quality issues, and conveyance operations. The Watermaster has completed a report entitled *Term 91: Stored Water Bypass Requirements*.

The report discusses Term 91, a provision that has been included in many water permits. The report notes that the Central Valley Project and State Water Project (Projects) are required by D-1641 and other Water Board decisions and orders, to release stored water to meet the Delta water quality standards when the standards are not met by natural flows. Term 91 restricts specified post-1965 diverters from diverting the stored water released by the Projects. Upstream Delta diverters who possess pre-1914 appropriations, riparian status, or pre-1965 issued water rights are not subject to Term 91. The report presents the issue of extending the scope of Term 91 and Term-91 like requirements to all water rights holders within the Delta watershed, regardless of individual water rights type status or priority date. The report also discusses the implementation of Term 91 during the 2012 Term 91 Curtailment Season.

POLICY ISSUE

None at this time. Informational Item

FISCAL IMPACT

None at this time. Informational Item

REGIONAL BOARD IMPACT

None at this time. Informational Item

STAFF RECOMMENDATION

Staff recommends that this report be accepted and follow-up actions and the Board take action to introduce the term to all diverters within the Delta watershed.

State Water Board action on this item will assist the Water Boards in reaching Goals 4 and 6 of the Strategic Plan Update, 2008-2012. Goal 4: to comprehensively address water quality protection and restoration: to enhance consistency across the Water Boards, on an ongoing basis, to ensure our processes are effective, efficient, and predictable, and to promote fair and equitable application of laws, regulations, policies, and procedures and Goal 6: enhance consistency across the Water Boards, on an ongoing basis, to ensure our processes are effective, efficient, and predictable, and to promote fair and equitable application of laws, regulations, policies, and procedures.

**TERM 91:
STORED WATER BYPASS REQUIREMENTS**

A Report to the State Water Resources Control Board
and
the Delta Stewardship Council

By

Craig M. Wilson
Delta Watermaster



TABLE OF CONTENTS

INTRODUCTION.....	3
TERM 91 COURT CASES	6
EXPANDING STORED BYPASS REQUIREMENTS	8
Permittees/Licensees	9
Watershed Considerations	9
Riparians	9
Term 91 Implementation in 2012	10
CONCLUSIONS.....	11

INTRODUCTION

Many of California's major water projects involve the storage of water in upstream reservoirs that is released after seasonal storage for beneficial uses. Chief among such projects are the State Water Project and the Federal Central Valley Project (Projects). While the priority of the Projects' water rights is junior to many downstream diverters, the law is clear that such diverters do not have a right to use water that has been previously stored and released. The rule of priority only extends to natural and abandoned flows. In essence, stored water that is released is water that is not subject to appropriation and not available to riparian and other users.

Pursuant to numerous Board decisions ([D-1485](#), [D-1641](#), [Order 2001-05](#)), the Projects are required to release stored water to meet water quality standards in the Delta (including flow and salinity standards) where natural flows are insufficient. The obligation was originally placed on the Projects as an interim measure pending future studies of how the obligation to meet water quality standards would be shared with other appropriators. In return for resolving Project protests on subsequent applications to appropriate water, Term 91 was developed and made a condition to permits issued after 1965. Term 91 prohibits diversions by these Permittees when natural and abandoned flows to the Delta are insufficient to meet the water quality standards and the Projects are supplementing such flows with previously stored water to meet the standards. Term 91 is triggered when two conditions occur simultaneously. (Decision 1594, page 13). First, the Delta must be in "balance", which occurs when the Projects are being operated to meet water quality standards in the Delta. Second, the water being released to meet the standards is supplemental water (releases from storage plus imports from the Trinity River are greater than Project exports plus carriage water requirements). As such, Term 91 is a measure designed to share the responsibility for meeting the water quality standards with specified junior diverters. Without Term 91 these diverters would take water that was otherwise being used to meet standards thereby forcing the Projects to release more stored water. Thus it serves to preclude post 1965 appropriators from interfering with the Projects' obligation to meet the standards and in practical effect requires such appropriators to share in meeting the water quality standards.

A major purpose of the Delta Reform Act of 2009 is achieving the coequal goals of providing more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. Crucial to the Delta ecosystem is maintaining adequate water flows both into and out of the Delta. Restoring Delta Flows and channels to support a healthy estuary and other ecosystem is a key subgoal and strategy of the Delta Plan. (Water Code section 85302 (e)(4)). The primary intent of Term 91 is to ensure that diverters do not use supplemental Project water being released so that the water will be bypassed through the Delta to improve water quality.

If future actions to protect the Delta ecosystem result in revised Delta inflow and outflow standards, a question that must be addressed is from where the water will come. On average, approximately 10 million acre-feet of water is diverted upstream of the Delta,

between one and two million acre feet within the Delta itself, and about five million acre feet is for south of the Delta diversions. Each of these three areas of diversions could play a role in addressing flow needs. Additional water could be made available through a variety of implementation efforts, including: more water storage projects, more efficient conveyance facilities, voluntary transfers, voluntary conservation, voluntary exchange agreements, additional releases of stored water, reducing illegal diversions, and more efficient water use efforts. Many of these measures would be encouraged if the State Water Board took action regarding compliance and expansion of stored water bypass requirements. Term 91 can be expanded to include more diverters. Additionally, it is appropriate to impose requirements, similar to Term 91 on any stream with a reservoir where the operator is required to release or bypass stored water to meet flow requirements downstream.

The purpose of this report is to explore the enhanced use and more vigorous enforcement of diversion curtailments as a means to achieve flow standards. This subject matter is relevant to the Delta even through the Projects are under a present and legal obligation to meet existing flows standards. Why? First, the flow standards are likely to be revised in a way that will modify the amount of stored water that must be released. It will become harder for the projects to meet both the revised flow standards and delivery obligations. Violations of the flow standards are more likely to occur in the absence of robust stored water curtailment efforts. When stored water releases are being made to achieve flow standards, persons should not be able to take such water before it reaches the Delta. Requiring other diverters to help achieve the standards increases the likelihood they will be met. Diversion curtailments are a logical way to help ensure compliance with the standards. The State Water Board has imposed diversion curtailments on certain junior water holders through its Term 91 process. Expansion of such efforts would be one way to address the question of where the water will come from to meet revised flow requirements. Greater compliance with curtailment requirements should also be implemented.¹

The rest of this report will focus on 1) better enforcement of existing curtailment requirements and 2) the types of proceedings and other measures that can be taken to ensure that stored flows are not diverted, but rather are bypassed when they are needed to meet Delta flow standards.

Term 91 only applies to post 1965 appropriations. There are hundreds of Delta watershed permits and licenses issued prior to 1965 that do not contain Term 91. As such, there is not a condition in these water rights requiring a cessation of diversions when stored water from the Projects is being released to meet Delta water quality standards. Additionally, there has been no action to consider the imposition of Term 91-

¹ Such efforts would be consistent with the State Water Board's 2008 Strategic Workplan for Activities in the San Francisco bay/Sacramento-San Joaquin Delta Estuary: "If adequate natural and abandoned flows continue to be unavailable to meet water quality and flow objectives, the State Water Board may take additional actions. Water conservation requirements will be considered as will a proceeding to ensure that natural and abandoned flows are not diverted when they are needed to meet flow objectives." (P-83)

type restrictions on Delta watershed diverters whose water rights derive from riparian or pre-1914 appropriations status or on other watercourses where release of stored water to meet water quality standards is occurring. Broader application of diversion curtailment conditions on water rights that exist downstream of water supply reservoirs is an appropriate exercise of the State Water Board's authority where the reservoir operation is required to release or bypass stored water to meet downstream flow requirements. Given the legal requirement that a valid water right does not allow the holder to divert water that has been stored upstream and released after seasonal storage, it can be fairly argued that Term 91-like restrictions should be applied to such water rights. Accordingly, this report will address how a broader application of diversion curtailment conditions can be implemented and the practical issues presented.²

² For more thorough background on the genesis and history of Term 91 see State Water Board Decision [D-1594](#), [Order WR 2004-04](#), and the court opinion in *El Dorado Irrigation District v. State Water Resources Control Board*. 142 Cal.App.4th 937, 48 Cal.Rptr. 3d 468 (2006).

TERM 91 COURT CASES

There are two recent court cases dealing with the stored bypass issue.

- 1) *Phelps v. State Water Resources Control Board*, 157 Cal. App. 4th 89; 68 Cal. Rptr. 3d 350 (Oct 2007). Authored by then Justice Tani Cantil-Sakauye, now Chief Justice of the California State Supreme Court.
- 2) *El Dorado Irrigation District v. State Water Resources Control Board*, 142 Cal. App. 4th 93; 48 Cal. Rptr. 3d 468 (Sept. 2006). Authored by Justice Ronald Robie.

These cases contain important background, guidance, and law regarding the stored bypass issue:

- Without adequate freshwater outflows from the Delta, seawater intrudes into the Delta and degrades water quality. Phelps, page 94.
- High salinity and low Delta outflows can be harmful to agricultural, municipal and industrial users, and to various species of fish and wildlife throughout the Bay-Delta Estuary. Phelps, page 94.
- The State and Federal Projects substantially alter flows within the Delta watershed by storing winter and spring runoff and later releasing stored water. Phelps, pages 94-95.
- Since 1978, the State Water Board has required the Projects to release water from storage or to curtail diversion when flows entering the Delta would otherwise be insufficient to meet flow and salinity based water quality standards. Phelps, page 95.
- In Decision 1594, the State Water Board concluded that it was appropriate for certain junior priority Permittees to share the responsibility with the Projects in meeting Delta Water Quality Standards. As an interim solution, the Board adopted water right Permit Term 91 in 1980. Term 91 required these Permittees to curtail their diversion when the Projects were releasing stored water to meet water quality standards. Phelps, page 106.
- Term 91 is not inconsistent with Area of Origin Statutes. Supplemental water released from storage by the Projects is not available for others to appropriate and is not available to riparian right holders, since it is not natural flow. No riparian or appropriator has a right use water that was previously stored or imported by another upstream and then released into the watercourse for use. However the statutes do require that water be made available to area-of-origin users from the Projects upon payment. EID, page 976.

- The State Water Board adopted Term 91 as an interim measure, anticipating a long-term solution to how responsibility for meeting water quality standards would be shared. The Board commenced Phase 8 of the Bay-Delta water rights hearings to determine permanent allocations of responsibility with respect to meeting flow dependent standards. Phase 8 was subsequently dismissed after the State Water Board approved agreements between other appropriators regarding the shared responsibility to meet standards. EID, pages 950 and 955.
- The Projects continue to be ultimately responsible for meeting Delta standards and no final decision has been made regarding the allocation of responsibility among the water users in the Delta watershed for meeting those standards. The Board is under no obligation to require the projects to bear all the burden to meeting water quality objectives indefinitely. EID, page 964.
- It is inappropriate, based on the rule of priority, to include Term 91 in a permit when that Term is not included in permits that are junior in priority. EID, page 970.
- There are hundreds of water rights in the Delta watershed with priority dates between 1927 and 1965. EID, page 964.
- The fact that many appropriators are not subject to Term 91 does not mean that the standards will go unmet. Instead the Projects will simply have to release more stored water meet the standards, because the State Water Board has imposed the ultimate obligation for meeting the standards on the Projects (abet on an interim basis). Term 91 functions to protect the Projects by relieving them of some of the responsibility for meeting the standards that would otherwise fall on them. EID, page 967.
- The State Water Board has the power to convene a proceeding to include Term 91 in the permits of other appropriators so as to more fairly allocate the responsibility of meeting standards among the various water users throughout the Delta watershed. It is unfortunate that the Board did not do so. EID, pages 969-970.

EXPANDING STORED BYPASS REQUIREMENTS³

In essence, Term 91 requires the bypass of stored water under prescribed circumstances. Accordingly, Term 91 will be described hereinafter in this report by a descriptive phrase: The Stored Water Bypass Requirement. The current system works as follows: in years when the prerequisites for invoking Term 91 occur, the State Water Board issues a “Notice of Curtailment of Water Diversion” to certain permit and license holders in the Sacramento-San Joaquin watershed. The curtailment of diversions is ordered when: 1) the Delta is declared to be “in balance” (when the Projects can meet the standards and its export demands with no extra water available), and 2) supplemental stored water from the federal Central Valley Project and the State Water Project is released to meet water quality standards and other in-basin entitlements in the watershed. The notice advises the Permittees and Licensees subject to the Stored Water Bypass Requirement that they will be curtailed from diverting water under their water right for a specified period of time. If the water right holders plan to use water during the curtailment period, they must use an alternate supply such as ground water or contract (purchased) water. Additionally, a certification of compliance must be filed.

The fundamental issue related to this program is that only a small percentage of total diverters in the Delta watershed are required under Term 91 or otherwise to bypass the stored water being released by the Projects to meet water quality standards. Permittees and Licensees with a water right priority date earlier than 1965 are not required to curtail diversions. Neither are riparians or pre-1914 appropriators.

It is the recommendation of this report that the requirement to curtail diversions of released stored water be extended to all water right holders on a phased basis pursuant to relative water right priorities where the release of such stored water is being used to meet water quality standards. For Permittees and Licensees with pre-1965 priorities, a Stored Water Bypass Requirement should be added to their permit or license.⁴ For riparian and pre-1914 appropriative water rights, curtailment letters are also appropriate for any diversion of stored water releases based on the State Water Board’s general authority to prevent unlawful diversions. Diverting stored water when no natural or abandoned flow is available is an unlawful diversion. Stored water releases are not subject to appropriation, are not available for use under any other claim, and are therefore unreasonable.

However, developing a program to apply a Stored Water Bypass Requirement on all Delta watershed water right holders presents practical problems that must be addressed.

³ While this report focuses on Term 91, expansion of diversion of curtailment conditions is appropriate in other areas. A similar water right term, Standard Term 93, applies to 104 permits /licenses within the San Joaquin River Watershed. It requires curtailments by certain San Joaquin River permittees/licensees when water releases are required to meet water quality objectives in the Delta.

⁴ Term 91 could be added to other permits & licenses through expansion of an existing water right proceeding, by adoption of a general Decision, or by regulation.

Permittees/Licensees

Extending the Stored Water Bypass Requirement to all Permittees and Licensees must be done in a way that respects the priority dates of the water rights. That can be done by issuing curtailment letters at different times for different priority groups. The process could work as follows:

- 1) Determine the amount and time of the initial supplemental water releases for the Projects.
- 2) Calculate how much water needs to be curtailed to avoid supplemental water releases.
- 3) Send curtailment letters to the most junior-in-right Permittees/Licensees who divert close to the amount of supplemental water being released with a margin of error built-in.
- 4) After the initial letters are sent, determine if curtailments are sufficient to avoid continued supplemental water releases.
- 5) If supplemental releases are still required, curtailment letters would be issued to another group of more senior Permittees/Licensees and so on. Letters could also be sent to pre-1914 diverters if supplemental releases are still required after sending letters to all Permittees/Licensees to the extent that no natural or abandoned flows are available.

This program would be fine-tuned based on data as to how much diversions are reduced as a result of the curtailment letters.

Watershed Considerations

Based on how unreasonable use and public trust considerations apply in different watersheds, it may be appropriate to impose different stored water bypass requirements based on local conditions.

Riparians

Riparians, based on their high priority status, have the right to divert whatever natural flows are in the watercourses into which stored water is being released. However, when the Projects are releasing stored water, the percentage of natural flows may be quite small. Accordingly, it is appropriate to send curtailment letters to riparians requiring them to limit their diversions to remaining natural and abandoned flows. Curtailment letters would be sent to riparians only in the situation when the Projects must still release supplemental water after all appropriators have been issued curtailment letters. Such letters could require riparians to reduce diversions to the percentage of flow in the watercourse that is natural or abandoned.

Term 91 Implementation in 2012

After receipt of notice from the U.S. Bureau of Reclamation that the Delta was in balance and that supplemental stored water was being released to meet water quality standards, the State Water Board sent a Water Diversion Curtailment Notice (Notice) as required by Standard Water Right Term 91. The Notice, dated July 24, 2012, was sent to 27 Permittees and Licensees.⁵

Pursuant to the Notice, the affected Permittees and Licensees were required to discontinue any water diversion under their permit or license from August 2, 2012 through August 31, 2012. Affected persons were required by August 15, 2012, to complete and return a 2012 Term 91 Compliance Certification Statement. This statement required persons to certify that they had either: 1) ceased all diversion, 2) were diverting under an alternative source (such as by water purchased by contract or by riparian right, or 3) the diversion took place at a point not in hydraulic continuity with the Delta.

As of the date of this report, statements were received from all 27 Permittees and Licensees subject to this year's Term 91 Notice. One diverter filed his statement after receiving a draft Cease and Desist Order. All persons indicated that they had either not diverted water or that they had diverted water pursuant to an alternative source.

State Water Board staff engaged in checking to verify compliance with this Notice. Checking included reviews of aerial photographs, interviews with affected diverters, and compliance inspections. In some cases, where it was determined that either diversions were occurring or that pumps that can supply water to Term 91 properties were operating during the curtailment period, follow up reviews were conducted. In two cases where pumps had been running, it was determined that the water diverted was being supplied to non-Term 91 property. In another, it was determined that a Term 91 diverter had purchased the water being pumped. While not all 27 Term 91 diverters were inspected, the staff's spot checking found no instance where the 2012 Curtailment Notice had been violated. In future years, staff intends to continue monitoring for compliance with Term 91, including compliance inspections. If violations are found, enforcement action will be taken as appropriate.

⁵ The number of Permittess and Licensees who are sent a Notice is dependent on the Term 91 season. In wet years, no Notices are sent. The earlier Term 91 goes into effect, the more persons are sent a Notice.

CONCLUSIONS

- 1) Stored Water Bypass Requirements, such as Term 91, serve a valid purpose.
- 2) Currently, Term 91 only applies to certain junior water right holders.
- 3) It should be extended to all water right holders who divert water from watercourses and their tributaries into which the Projects release supplemental water.
- 4) The expanded program must respect established water rights priorities, but diversion curtailment conditions can be tailored to different watershed conditions.
- 5) It is appropriate to impose Term 91-like conditions on all watercourses with upstream reservoirs that are releasing stored water to meet flow requirements downstream.
- 6) Curtailment requirement should be monitored for compliance and enforcement actions should be undertaken where appropriate.