

The background of the top half of the cover is a photograph of a dense forest with sunlight filtering through the trees. The bottom half of the cover is a photograph of a stream flowing over mossy rocks, creating white water rapids.

A Practitioner's Guide To Instream Flow Transactions in California

Small Watershed Instream Flow Transfers (SWIFT)
Working Group

March 2016

*A guide to help water right holders
- and those assisting them - understand their options
for keeping water instream in California.*

A Practitioner's Guide to Instream Flow Transactions in California

March 2016 (Version 1.1)

This document is periodically updated. Please visit the following website to access the latest version of this document and other useful information related to instream flows:

calinstreamguide.org

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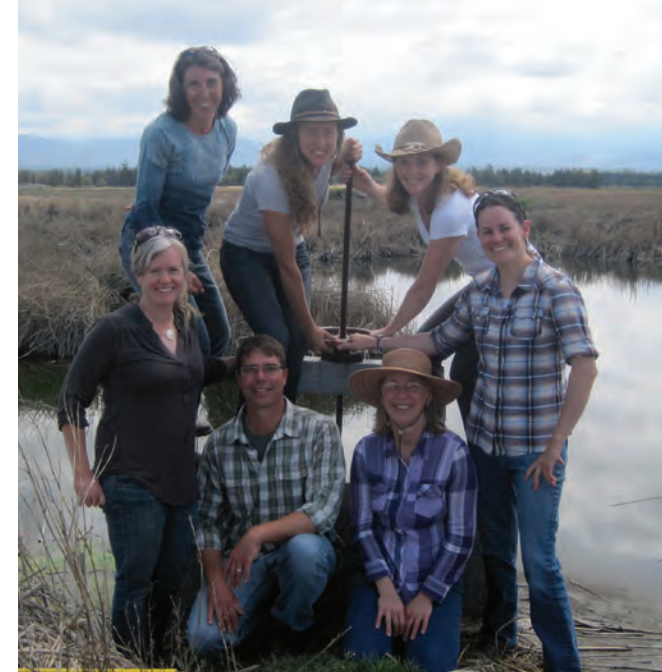
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This document and additional information available at calinstreamguide.org.

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Chapter 1

Introduction



Purpose

The purpose of this guide is to help water right holders – and those assisting them – understand their options for keeping water instream in California. This guide briefly describes some of the most common types of instream flow transactions (i.e., methods for restoring flow for environmental purposes), and discusses in detail how to navigate the process of completing an instream flow dedication by changing a water right, as permitted by Water Code Section 1707.¹

The intended audience for this document includes both water rights holders and practitioners, such as staff for land trusts, water trusts, Resource Conservation Districts (RCDs), and other organizations. This guide focuses on instream dedications via the change petition process administered by the State Water Resources Control Board (State Water Board). Other publications – for example, the Trust for Public Land’s Water Acquisition Handbook (2003) – provide a more general overview of acquiring water for environmental purposes in California. This guide will provide a description of the change petition process, and offer advice on how to navigate, troubleshoot,

and work in partnership with the State Water Board and other natural resource agencies to complete an instream flow dedication.

Background

Section 1707 was added to the California Water Code by the state legislature in 1991. This section of water code enables the State Water Board to approve petitions to change existing water rights for the purposes of preserving or enhancing wetlands, protecting fish and wildlife, and recreation. The statute allows “any person entitled to the use of water, whether based upon an appropriative, riparian, or other right” to petition the State Water Board for a change to their water right on either an urgent, temporary or long-term basis.

The importance of instream transactions, including dedications of water for instream purposes, has been emphasized in the California Water Action Plan (2014), California Water Plan (2013) and the California Drought Contingency Plan (2010), as well as in federal and state salmon and steelhead recovery plans. Although Section 1707 is lauded as an important tool for protecting and enhancing stream resources,

it has been used sparingly. According to the State Water Board’s website, over the past two decades, the State Water Board has processed fewer than 40 petitions for 1707 transfers.²

The limited use of Section 1707 has, in part, stemmed from uncertainties associated with the petition process, which the State Water Board has committed to improve. In the past, this challenge included lengthy processing times, vague requirements for baseline information, unclear California Environmental Quality Act (CEQA) exemptions and/or lead agency designations, and lack of practicality for use in emergency or temporary situations. The State Water Board has helped address many of the administrative hurdles in recent petitions. Ambiguous or inconsistent expectations from the petitioners have also limited both the use of Section 1707 and the intended benefits of the 1991 legislation. It is the authors’ hope that this document helps to guide petitioners through the water rights change process as well as clarify expectations for completing an instream flow transaction.

Intent and Scope of Document

The intent of this guide is to clarify and recommend strategies for successfully navigating the 1707 process so that instream dedications are more widely and easily used in California.

The authors of the guide represent a handful of organizations that have firsthand experience with the instream dedication process. Most of that experience is with relatively small-scale instream transactions for fish and wildlife. As such, many of the examples and recommendations presented in this guide are most applicable to landowners or practitioners



Instream Transaction: An action that intentionally results in water that was previously diverted at a specific time and place to be left instream. Transactions can include a water lease or purchase, a forbearance agreement, a formal water rights dedication, or other intentional acts to reduce a water diversion and leave water instream. Ownership of the right does not necessarily change.

Instream Dedication: Refers to an instream flow transaction that includes a water right change in accordance with Water Code section 1707; this results in the transaction being recognized by the State Water Board. In this guide, we use dedication to refer to transactions of any duration that include Section 1707 changes, not just permanent changes.

Water transfer: A temporary or long-term change in the point of diversion, place of use, or purpose of use resulting from a reallocation of water among water users.

**Additional definitions of terms mentioned throughout this document are provided in the Glossary.*

1. 1707 petitions can include changes in point of diversion. 1707 petitions can only be submitted for regular changes (Water Code Section 1701 et seq.), temporary urgency changes (Water Code Section 1435 et seq.), and temporary and long-term transfers (Water Code Section 1725 and 1735 et seq.); See Chapter 2 for more information.

2. http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/



Possible Partners for Instream Flow Projects

- » California Department of Fish and Wildlife (DFW)
- » California Department of Water Resources (DWR)
- » California State Coastal Conservancy (SCC)
- » National Fish and Wildlife Foundation (NFWF)
- » National Oceanic and Atmospheric Administration - Fisheries (NOAA)
- » Resource Conservation Districts (RCD)
- » State Water Resources Control Board (State Water Board)
- » Wildlife Conservation Board (WCB)
- » U.S. Fish and Wildlife Service (USFWS)

dedicating water rights for a local instream benefit. This guide does not cover situations involving larger transfers that rely on state and federal water project facilities. Because the authors' experiences have centered around fisheries, this guide focuses on instream use for fish and wildlife rather than dedications for other purposes such as wetlands or recreation. Our motivation for drafting the guide is to provide helpful suggestions gleaned from our experiences and from conversations with State Water Board staff that will help petitioners:

- » Decide whether to dedicate a water right or portion thereof to instream uses;
- » Prepare an accurate and complete petition for State Water Board and other agency review; and
- » Navigate the petition process as smoothly, cost effectively, and quickly as possible.

The document is not intended to be a comprehensive guide to the change petition process. It should be viewed as informational only and not as legal advice. Anyone considering an instream dedication – or any other change to a water right – should consider seeking the advice of an attorney with expertise in water rights law.

Throughout the guide, we use instream uses as shorthand for preserving or enhancing fish and wildlife resource use in the water.

Chapter 2 Getting Ready: How to Approach Pre-Petition Process



As you decide whether to pursue a project to improve instream flow, it will be important to ask yourself some basic questions that will help you identify your objectives, determine the best method for protecting water instream, and ensure that the project includes water rights that are valid.

If you do proceed with a water right change, the answers to these questions will also be useful in the change petition process.

What are the objectives of your project?

In order to understand how changes to existing water diversion(s) might impact stream conditions and how you might design a project to benefit instream flow, you will need to know some basic information about the hydrology and ecology of your project area. Consider discussing your proposed project with staff from the California Department of Fish and Wildlife (DFW) and other natural resource agencies and local conservation groups (*see Partner box on page 6*).

Different instream flow projects will have different or multiple objectives.

Examples include:

- » Improve summer rearing conditions for juvenile salmonids
- » Increase flows to facilitate or encourage fish migration either into or out of a stretch of river
- » Encourage riparian plant growth with wetted banks
- » Increase flows to clean spawning gravels of fine sediments
- » Connect previously unconnected sections of habitat
- » Allow a water right owner to return flow to a river without risk of losing a water right

As you consider the objectives of your project, specific questions to ask yourself and other project partners include:

- » What fish, animal, or plant species is the project intended to benefit? Is there a specific ecological process (e.g., water cooling, sediment flushing) you hope to achieve?
- » If your project is focused on a specific species, what life history stage are you targeting?

For example, are you trying to provide flows for rearing conditions for young salmon, for adult salmon during migration into the river for spawning, for mature salmon out-migrating to the ocean, or for all of the above?

- » When and where is water most needed for instream purposes?
- » Will the project alone yield the flows needed to achieve the targeted instream benefits or are other projects or actions needed?
- » Are there wetland species (e.g., frogs, birds, plants) that rely on current irrigation practices that could be potentially harmed by the project?
- » Are there other water users that could divert the water left instream as a result of the project or conduct other actions that would diminish the project's intended benefits?
- » What does the water right holder hope to achieve through the project (e.g., satisfaction, compensation, infrastructure improvements, water reliability, greater regulatory certainty, etc.)?

If other project partners and funders are providing support to the project, you will want to include them in project development. A funding partner might have specific ecological objectives, time restrictions on expenditure of funds, or other intentions that limit their support. It is also important to understand the contractual and monitoring requirements of your project funder(s) or other stakeholders. On-site discussion at the earliest project stage can provide partners with a firsthand view of the project and help them be more realistic in their expectations. Communicating early and often will set up your project for long-term success.

What kind of water rights are involved?

When implementing an instream flow transaction project, a key first step is to identify the type of water right being considered for instream flow. The type of water right will help determine which legal tool(s) to use to implement the project and may help determine the conservation value of the project.

Not all water rights are created equal. Water rights have a hierarchy based on priority. In times of water shortage, water users with more senior rights (higher priority) are most likely to receive their full allocation of water and those with junior rights (lower priority) are less likely to receive their full allocation.

Common water rights terms are depicted in Figure 1 and further defined in the Glossary.

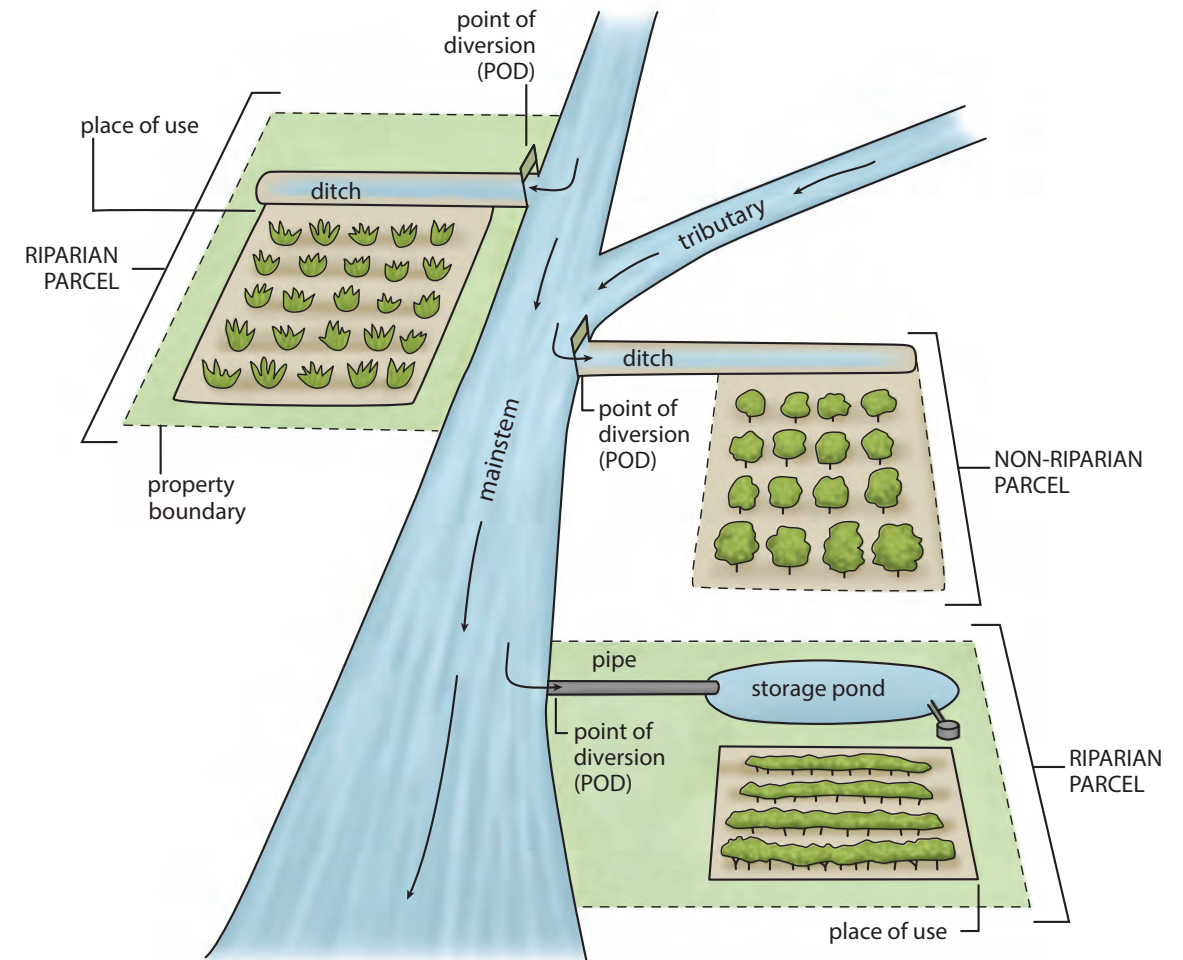
Following are brief descriptions of the major types of water rights in California.³

Riparian Rights

Riparian rights entitle the owner to a reasonable amount of the natural flow of water within a stream or other body of water to be used on a parcel of land located immediately adjacent to the stream or other body of water. The water can only be used on land that is associated with a parcel of land immediately adjacent (i.e., riparian) to the stream and within the drainage (i.e., watershed) of the water body from which the water was taken. Only water naturally flowing in the watercourse is subject to diversion under a riparian right. The right is inherent to ownership of the land and cannot be lost through non-use. Riparian rights are “correlative,” which means that riparian owners

Figure 1

Depiction of Water Right Terms



share the available supply in times of shortage. Riparian rights are senior to appropriative rights. Under a riparian right, water cannot be diverted and stored for use in a different season (e.g., diverted in a wet month or season for use in a drier month). Riparian claims are not usually quantified; that is, there is not a fixed amount of water defined for the right. Use of riparian rights does not require approval from the State Water Board, but users are required to submit Statements of Water Diversion and Use. A riparian water right holder is not subject to forfeiture or partial forfeiture for non-use.

Appropriative Rights

Appropriative rights are created by putting to beneficial use a specific quantity of water at a specific location (i.e., place of use). Unlike riparian rights, appropriative rights allow water to be stored and used on non-riparian land. Appropriative rights are junior to riparian rights, and priority among appropriative users is established by date (“first in time, first in right,” also known as the “prior appropriation” doctrine). Appropriative rights can be lost if they are not used for a period greater than five years.

3. For more information, see references listed in Chapter 6: Water Law.



Pre-1914 Appropriative Rights

Before 1914, a water user could establish an appropriative right by posting a notice, constructing diversion facilities, and putting the water to use. This type of appropriative right requires evidence of use before 1914 and continued use thereafter.

Post-1914 Appropriative Rights

California enacted the Water Commission Act in 1914, which established a comprehensive permit system for appropriative rights. Since then, all new appropriative rights are created through an application process that is administered by the state agency that is now the State Water Board. This type of appropriative right can be granted only after a public process in which the applicant is required to demonstrate the availability of unappropriated water and the ability to place that water to beneficial use. The water right is quantified in a permit, license, or registration.

All water rights and water use are subject to the doctrine of reasonable use, which requires that water use be “limited to such use as shall be reasonably required for the beneficial use to be served.”⁴ For more information about California’s water rights, see Chapter 6 and the State Water Board Division of Water Rights Frequently Asked Questions [webpage](#).

4. California Constitution. Article 10, Section 2.

Legal tools for implementing instream flow projects – what are the options?

In order to implement an instream flow project, you may need to employ one or more legal tools. You might wonder why any legal mechanism is necessary – after all, you could simply arrange for the water right holder to reduce or eliminate existing diversions, thereby leaving the water instream for the benefit of the environment. But this would likely not be a satisfactory arrangement for a successful streamflow project, for several reasons:

- » Without formal recognition of the instream water use by the state, there is nothing to prevent existing or new water users with junior priority from diverting the water left instream; in some cases, this will significantly reduce the benefits of your project.
- » Reducing or eliminating an existing diversion without obtaining a formal recognition of the right to use the water instream may leave the right holder vulnerable to a claim that the water right has been lost due to non-use.
- » Without some formal arrangement requiring that the water be left instream for some period of time, project partners (you, funders, and other partners that have an interest

in supporting the project but do not have direct control over the associated water right or water management) may not have the assurances they need that the instream use will occur over time. As a result, they may be reluctant to invest the time, funding, or other resources necessary to support a project.

There are two primary ways to formalize a water right holder’s switch from consumptive to instream uses: water rights changes and forbearance agreements. The option you choose – or whether you choose a combination of both – will depend on the characteristics of your specific project. These options are described below.

Water Rights Changes

California law allows water right holders to change their water rights to keep all or a portion of their water rights allocation for use instream. To do this, the water right holder files a [Petition for Change](#) with the State Water Board pursuant to Water Code Section 1707. Section 1707 allows instream beneficial use without the diversion and control of water.

The procedure for doing this depends on the nature of the existing water right:

- » For post-1914 appropriative rights, the change is accomplished by submitting a petition for change to the State Water Board.
- » For riparian and pre-1914 appropriative rights, no State Water Board approval is necessary.⁵ An appropriator or riparian may forbear diversion of water to allow instream use, and may enter into agreements involving the exercise of water rights for that purpose. If the right holder wants to claim credit for

beneficial use of the water used instream and/or provide notice to other water users that the dedicated water is not available for diversion, the user may elect to petition the State Water Board to approve a change under Section 1707. There may be limits on the riparian’s right to use water beyond the riparian parcel lines unless the State Water Board approves a Section 1707 change.

- » Finally, in the relatively rare cases where streams have been formally adjudicated, water rights changes may need to be finalized by modifying the decree for the basin with the appropriate court, depending on the terms of the adjudication. This action would be required in addition to receiving State Water Board approval of a change petition.

The petition to change the water right to allow instream uses associated with the right is carried out under Section 1707, which provides that the purpose of use of all or a portion of a water right can be for instream uses. Section 1707 affords flexibility to the water right holder. A water rights change under Section 1707 can designate the new instream use as the **only** purpose and place of use – effectively requiring that the water be left instream. Alternatively, it can simply **add** instream uses to the list of allowable uses under the right – with the effect of allowing the water right holder to leave some or all of the water instream at times of their own choosing.⁶ It further allows the petitioner to specify the timeframe when the dedication will occur (i.e., the calendar year dates when the instream use applies) as well as the duration of the instream dedication (urgent, temporary, or long-term).⁷

5. See Water Code Section 1706. 6. Sometimes referred to as a “permissive” change. 7. The water code allows for long-term changes. Long-term does not necessarily mean permanent, as a water right holder could petition the State Water Board to change the water right in the future. Although permanence is not necessarily a part of the change petition process, it could be a funding -- or other -- requirement of the project, and could be secured through other mechanisms (e.g., contracts or forbearance agreements).

Additionally, the water right holder can continue to hold the water right that has been designated for instream uses, or transfer the right to another entity, such as the state or a non-profit organization. By contrast, in some other western states only the state can hold a water right with an instream place of use. These options give California water rights holders more flexibility when considering a dedication of water to instream uses.

An important element of a water rights change in California is that the water right maintains its priority. For appropriative water rights holders, the priority date establishes the water right's seniority among other appropriative water rights holders. This priority is important as it allows the dedicated instream water to be protected from diversion by junior water right holders.

Forbearance Agreements

A forbearance agreement is a contractual arrangement between an organization and a water right holder that typically specifies the terms under which a water diversion will be managed for instream use. It defines the responsibilities of both the organization and the water right holder. It does not change any terms of the water right itself; rather, it simply obligates the water user to forebear diversion of some or all of a right to allow water to be left instream. Therefore, it does not require the approval of the State Water Board. However, as noted above, the water cannot be counted as beneficially used for water right reporting purposes; it is essentially an agreement to not exercise or partially not exercise a water right.

Forbearance agreements can take several forms, including a water lease agreement – which could be a short-term document between the organization as lease holder and the water right holder – or a covenant that runs with the land

and is recorded on the deed to the property with the County's records office. These recorded forbearance agreements or covenants are often used in exchange for long-term conservation investments in water infrastructure and can be binding on current and future landowners.

In some cases, the water right holder may be financially compensated by a water trust, conservation organization, or agency for entering into a forbearance agreement. For example, a water user may be paid to forgo use of their water and leave that water instream – either temporarily or permanently. Payment is often on a per acre-foot basis for the volume of water leased during the lease period. Such transactions have the benefit of being able to be performed quite quickly. In other cases, the right holder may be compensated for infrastructure costs – for example, water storage tanks, or ponds – that allow the user to switch the timing of their diversion to the wet season and forgo diversion during the dry season, thus leaving water instream during the low flow periods when fish need it most. See the French Creek and Whitethorn School Case Studies in Chapter 5 for a glimpse of how forbearance agreements have been used across the state. Forbearance agreement examples are included in the Appendices.

A significant potential drawback to pursuing a forbearance agreement alone – without a water right change – is that the water is not protected from diversion by other water right holders. It therefore does not prevent other water diverters that are not party to the agreement from using the water that was intended to be left instream. Depending on the location of the instream transaction, this limitation may be of little practical importance because:

a) there are no other active diverters between the leased diversion site and the targeted section of stream,

b) all downstream diverters are participating in an instream transaction program in which they have agreed to refrain from diverting water designated for instream flow purposes; or

c) downstream water users are already obtaining their full water right before the added water is released instream. (A watermaster is very helpful in ensuring the latter case, as the Scott River Water Trust has experienced.)

Another potential drawback of forbearance agreements is that they do not protect against forfeiture. An appropriative water right could be forfeited due to non-use if the water is left instream for more than five consecutive years. For this reason, long-term or continuous forbearance agreements are most commonly used for projects involving riparian rights. In order to address concerns of forfeiture with appropriative rights, agreements can be structured such that they do not require forbearance for more than five consecutive years.

Water Rights Changes and Forbearance Agreements

Water rights changes and forbearance agreements can be used in tandem. A forbearance agreement may allow the signatory organization the ability to enforce the agreement or adaptively manage the forgone diversion only with the water right holder. A water right change provides for enforcement only through the State Water Board or the courts. Using a water rights change and forbearance agreement together allows for both options.

In some cases, water right holders may opt to keep the original beneficial uses of their water right (e.g., irrigation, stockwater, domestic) and add fish and wildlife as an instream purpose of use through a Section 1707 change. Adding a purpose and/or place of use while maintaining the existing purpose and place of use is

sometimes called a “permissive change” (see the French Creek case study in Chapter 5). Having multiple beneficial uses listed on the water right can provide water management flexibility and protection against forfeiture. However, because such a change to the underlying water right may not necessarily specify when or how much water must be used instream (versus other uses), the water right change alone does not guarantee an instream benefit. In addition to completing a water right change, it may be desirable to sign a forbearance agreement or other contractual agreement that provides for a specified level of instream flow. Consider discussing these pros and cons with the water rights holder, project funders and partners.

Pursuing a water rights change – Questions to Ask

The Instream Flow Decision Stream (Figure 2) can help to guide water users and project partners through some of the important questions and decision points in an instream flow project. A few of the questions in the Decision Stream are discussed in detail below.

Is the Water Right Valid?

Once you know what type of water right you have, you will want to ensure the right was properly established and used in accordance with the law. Uncertainty about a water right does not necessarily make an instream dedication impossible, but it is important that you are informed about any issues before moving forward.

Detailed below are some of the challenges to look out for with different types of water rights. In some cases, seeking legal expertise may be necessary.

Riparian Rights

You could have a problem if:

- » Diverted water is being used on property that is not contiguous with the stream source, or has been divided from a riparian parcel without a specific reservation of the riparian right.
- » Water is being diverted and stored for use in a different season (e.g., in a wet time or season for use in a drier time).
- » Water is being used on land outside the watershed (i.e., water drains to a different lake, river, stream or creek than it came from).
- » Statements of Diversion and Use have not been submitted to the State Water Board.

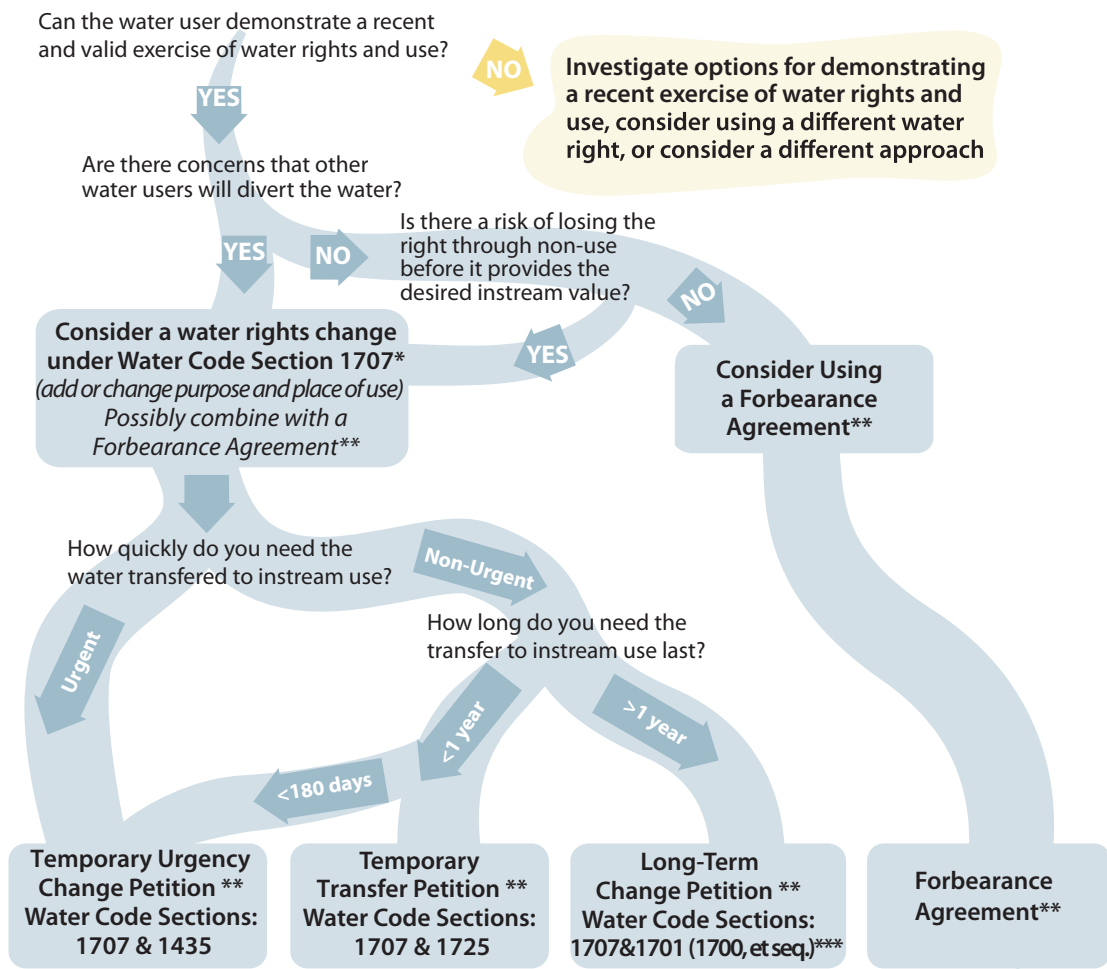
Appropriative Rights

You could have a problem if:

- » Water has not been used in accordance with the conditions specified in the permit or license (e.g., point of diversion, place of use, rate of diversion, quantity).
- » A water right permit was received but was not licensed within the time period specified by the permit development schedule or before time extensions expired⁸.
- » The water has not been used for an authorized purpose.
- » The water right has not been used in over five years⁹.
- » There is a lack of evidence of continuous beneficial use of the water since the right was established (for pre-1914 appropriative rights).
- » Statements of Diversion and Use, Reports of Permittee, or Reports of Licensee have not been submitted to the State Water Board.

State Water Board (statutory adjudication) in a final order, or decree. When water rights are adjudicated, a watermaster is often assigned to monitor the diversions subject to the adjudication and ensure that the decree is being followed. They may be employed by the Department of Water Resources, a special watermaster district, or a private contractor, but they report to the Court or the State Water Board. An adjudication can simplify instream flow management by clarifying the amount, timing, and priority of water available under your right, and the watermaster can help protect designated instream flows from being diverted by lower-priority diverters – both upstream and downstream. However, it is important to note that changes made through the watermaster with respect to how the water right is exercised (such as changes to the point of diversion or place of use) are not always officially recorded with the court. This can result in having to review watermaster records and update the official decree as part of a 1707 change petition process. To see a list and a map of California’s adjudicated streams visit the State Water Board [Water Rights Judgments website](#).¹¹

Figure 2 Instream Flow Transaction Decision Stream



* A petition for change can either (a) replace the original purpose of use (e.g., irrigation) with instream use or (b) add a purpose of use to the original use (multiple uses).

** Depending on the situation, a practitioner may want to use a forbearance agreement in tandem with a 1707 change. Forbearance agreements and 1707 petitions are not mutually exclusive.

***Water Code Section 1701 constitutes a change to a water right (point of diversion, place of use, or purpose of use) without specifying a duration of time. This can be viewed as either a permanent change or one that is in place until subsequently changed by a future petition.

Adjudicated Rights

If your project is in an adjudicated watershed, some of the items specified as potential issues for riparian and appropriative rights may have been addressed as part of the adjudication process. Adjudication is a process in which a comprehensive determination of active water rights in a stream system, including appropriative and riparian rights, is made.¹⁰ The diversion quantity, timing, use, and priority for each water right holder are prescribed by the Superior Court (court adjudication) or the

Where can I find water right information?

The way a water right is recorded and identified by the State Water Board depends on the type and status of the water right. The primary identification codes used by the State Water Board for identifying existing water rights are: Application ID, Permit ID, License ID, and Statement ID. The first three identification

8. For more information, see the State Water Board, Division of Water Rights, Process for Water Right Licensing at: http://www.theStateWaterBoard.ca.gov/waterrights/water_issues/programs/applications/docs/licensing.pdf

9. If the water was used but that use was not reported to the State Water Board, use may need to be verified by some other means (e.g., dated aerial photographs such as Google Earth maps, crop sale receipts, etc.). If the water user has reported incorrectly, they should amend their previously submitted reports.

10. In the case where dormant riparian rights exist, they may not be extinguished but may be subordinated to other rights in the adjudication.

11. http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/



Will a water right change benefit instream flow?

Outlined below are different ways to consider whether your water right change will benefit instream flow.

What is the quantity?

In order to understand the potential instream benefits of a water right petition, you should have a good grasp of how much water will be left instream as a result of your project. Below, we walk through some of the important questions to ask when thinking about the quantity of water to be dedicated.

What is the quantity of your water right?

1707 changes start with the parameters of the underlying water right (i.e., amount, rate, season of diversion, authorized purposes and place of use, points of diversion, and priority). All of these parameters define the water right, and the 1707 changes cannot enlarge or expand the right (amount, rate and season of use). This baseline information is critical for State Water Board review and approval of a 1707 petition.

For post-1914 appropriative rights, the quantity of the water right is described in a permit, license, and/or decree and is almost always expressed as a rate, usually in cubic feet per second (cfs) or as a volume (e.g., acre-feet). The right typically includes the purpose of use (e.g., irrigation, stockwater, domestic, etc.); place of use; the season that the water can be used (beginning and ending dates); and any additional terms limiting diversion (e.g., if a water user may only divert when the stream is flowing above a certain threshold).

Riparian rights are limited to reasonable and beneficial uses on the riparian parcel. Unlike

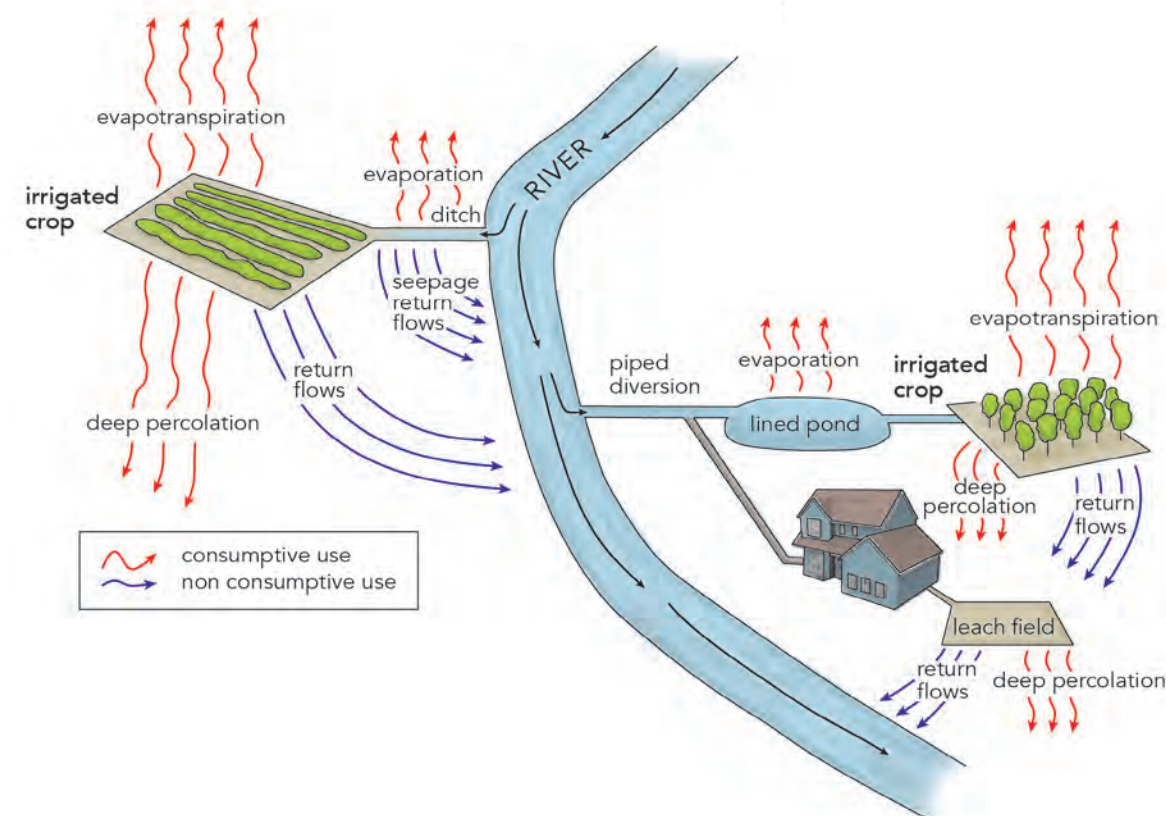
codes are associated with post-1914 appropriative water rights. Statement IDs are associated with Statements of Water Diversion and Use, which are primarily used to identify water rights that are not subject to the State Water Board's permitting jurisdiction (e.g., pre-1914 appropriative and riparian water rights). If you know the identification code for your water right, you can obtain this information through the Electronic Water Rights Information Management System (eWRIMS) database of water rights that the State Water Board maintains online.¹² More detail is available in Chapter 3.

The majority of surface water diversions, regardless of type, are required to report the amount and use of water to the State Water Board. Even if you have the necessary identification information for your water right, it is worth using the eWRIMS database to look up Statements of Water Diversion and Use, licensee and permittee reports, and other records that the State Water Board may have on file. If the water user has used the water right but has not reported use to the State Water Board, consider gathering adequate information to show that the water right has been active and work with the user to submit the appropriate reports or statements prior to initiating an instream flow project.

12. http://www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/index.shtml

Figure 3

Consumptive Use



appropriative licenses or permits, Statements of Water Diversion and Use do not limit the riparian right; they are merely records of use. For example, if a riparian water user chose to add domestic uses to a parcel previously used for irrigation alone, the riparian right would expand to include that new use and quantity; no new right or change in right would be necessary.

What is the quantity you can dedicate?

The questions below are meant to help water right holders and project proponents examine how much water has been diverted and used.

Is water available?

The answer is dependent on streamflow, which varies annually and inter-annually, and the

priority of the right relative to other water right holders. Sometimes a river or stream does not supply enough water to meet the needs of all water rights holders in the system. In this case, and depending upon the priority date of the water right, water may or may not be available for use. In order to anticipate project benefits, it is important to understand how often and under what streamflow conditions a water right holder receives his or her allocation of water. This will help determine whether cessation or modification of the right will result in a benefit to the stream.

Have the water rights been used recently?

If you cannot verify use of the water rights in the recent past, such as the previous five years, you may want to consider whether an instream dedication makes sense. If an appropriative

right has not been used for a period spanning longer than five years, injury to other legal users and non-use may be an issue (injury is discussed in more detail below). Also, dedicating a right that has not been used for a prolonged period of time may have no direct benefit for the stream. To assess whether water has been used, reference reports and Statements of Water Diversion and Use (see Chapter 3 for more information).

Does your project require a consumptive use analysis? If yes, how much water is consumptively used?

For some types of 1707 changes, the amount of water that can be dedicated to instream flow is limited to the amount of water that would have been consumptively used or stored in the absence of the proposed change—that is, the amount of water that is diverted and not returned to the stream. This is because, under conditions where some of the diverted water returns to the stream via surface runoff or groundwater percolation, downstream diverters have a right to, and may rely on, this flow for their own diversions. Figure 3 depicts how consumptive use relates to water diversions.

In the case of irrigated agriculture, the amount of consumptive use is the amount of the diverted water that evaporates, is consumed by crops during irrigation, or is otherwise removed from the stream system from which it originated. This could occur due to deep percolation into an isolated aquifer, drainage outside of the watershed, or other condition that prevents the diverted water from returning to the stream system where it would subsequently be available for diversion by other water rights holders. The non-consumptive use portion of the water right is the water that returns

to the stream system, either through surface flow runoff or through shallow groundwater percolation.¹³ In the case of municipal use, the portion of the water used for outdoor irrigation and washing hard surfaces that could reasonably return to the stream would be considered non-consumptive. Also a portion of the water entering a sewer system may return to the stream in the form of National Pollutant Discharge Elimination System (NPDES) permitted wastewater discharge, making the return water non-consumptive water use.

If you are proposing to dedicate an existing right to instream use under Section 1707, you may need to quantify the amount of water being consumptively used under existing conditions. Consumptive use quantities vary depending upon the crop grown, precipitation and other climate conditions during the specific time of year, soil type, geology, and – in the case of grazed land – grazing intensity. A professional environmental scientist or irrigation expert could be consulted to help determine the quantity of consumed water available for dedication per month or season of use.

What is injury and why should you care?

A change or transfer of a water right is not allowed to injure another legal user of water. This is called the “no injury” rule. It originates in common law and is also reflected in California Water Code provisions intended to protect legal users of water—regardless of their water priority—from a water transfer or other water right change that could reduce the availability or quantity of others’ water rights. If injury can be alleged in response to your proposed instream dedication, your 1707 petition process will be delayed until the allegation is evaluated by the State Water Board.

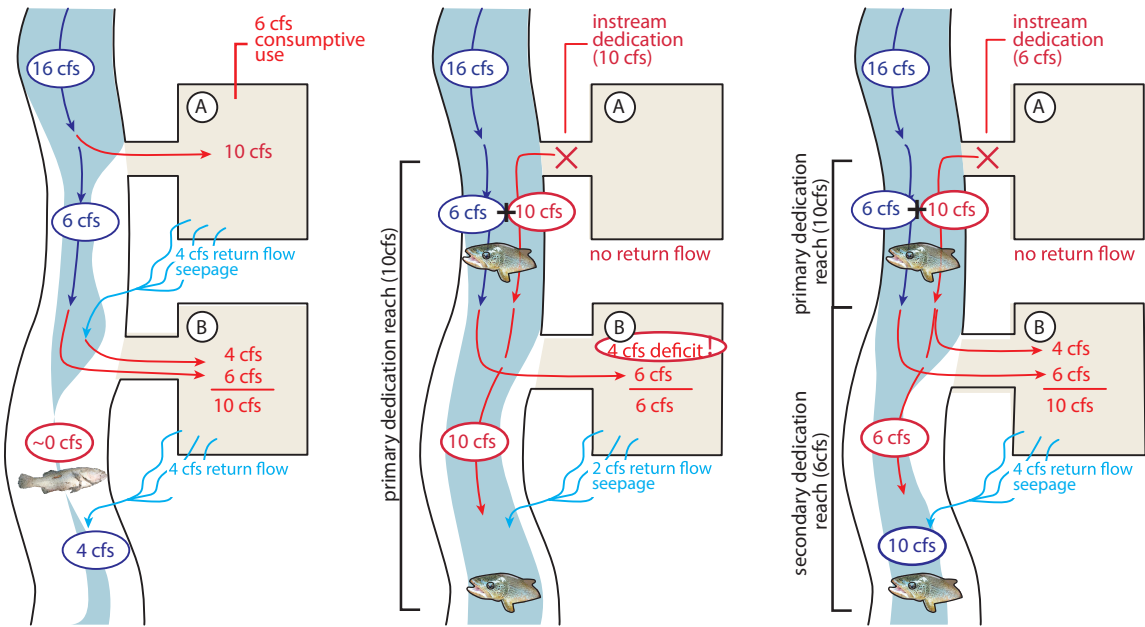
Figure 4

Example of Injury

Pre-Project

Injury

No Injury



Pre-Project Scenario
Farmer A has a 10 cfs water right that he would like to dedicate to instream flow for use by fish at a downstream location. When this water right is used for irrigation, 6 of the 10 cfs is consumed by the plants, evaporated or goes into deep percolation (consumptive use), and 4 cfs flows back to the river as return flows and seepage flows (non-consumptive use).

Dedication with Injury—All 10 cfs transferred to fish and wildlife use downstream.
Injury would be caused to Farmer B by this action if Farmer A expected the entire 10 cfs to be transferred to fish and wildlife use downstream. When Farmer A has used the water right for irrigation, Farmer B has relied on the 4 cfs of return flows to meet his/her water right.

Dedication with No Injury—Only the consumed portion of the water right (6 cfs) is transferred to the fish habitat.
Injury would not be caused to Farmer B by this action if Farmer A dedicated the entire water right (10 cfs) instream use in the reach immediately downstream, but only transferred the consumed portion of the right (6 cfs) to instream use in the secondary (lower) reach. This way, the same amount of water that was historically available for Farmer B when Farmer A was irrigating, is still available for Farmer B for use of his/her water right.

If injury is proven, your project will be denied or will need to be altered to avoid injury.

Many concerns regarding injury due to instream flow projects have to do with adequate analysis of consumptive use of the proposed water rights for an instream flow project. However, there are additional ways a proposed instream project could potentially cause injury.

See Figure 4 for an illustration of the “no injury” rule. This is an important concept to understand as you consider changes to your water right or an instream flow transfer project.

13. For more information on consumptive use see <http://www.cimis.water.ca.gov/>.

What is the quality of the water?

It is often assumed that more water is better for the stream. While that is often true, the issue is more complicated in some cases, and it may be important to understand how the 1707 petition could affect instream water quality conditions. For example, if one of your project's goals is to decrease water temperature but ceasing your diversion will actually result in increased water temperatures in the affected stretch of river, you'll possibly want to reconsider the project. The water quality parameters of import will be determined by the concerns in your particular stretch of stream and may include temperature, dissolved oxygen, nutrients, and sediment.¹⁴

How does the water to be dedicated relate to stream conditions in the specified reach?

What is the quantity of your water right relative to the stream flow during the time you are interested in leaving your right instream?

The rate of diversion relative to the flow of the stream can be important in assessing project benefits. Even relatively small quantities of water can be significant. For example, a tenth of a cfs might not seem like much, but it could substantially increase streamflow during the low flow season.

Are there other users in the reach who might divert the water?

Some water rights, when left instream, will have the intended benefit within the immediate stream reach. Other projects might attempt to improve stream conditions much further downstream. Once you determine the reach of stream you intend to benefit, you will want to identify the diverters in that reach, if any. If your project will involve moving water downstream past junior diverters, you may need to conduct a consumptive use analysis.

This helps ensure there that there is no injury to other water users from your instream flow transfer project. If there are no diverters in the reach you intend to benefit and loss of the water right for non-use is not a concern, you should consider whether you need to pursue a water right change at all or whether a forbearance agreement will accomplish the same purpose.

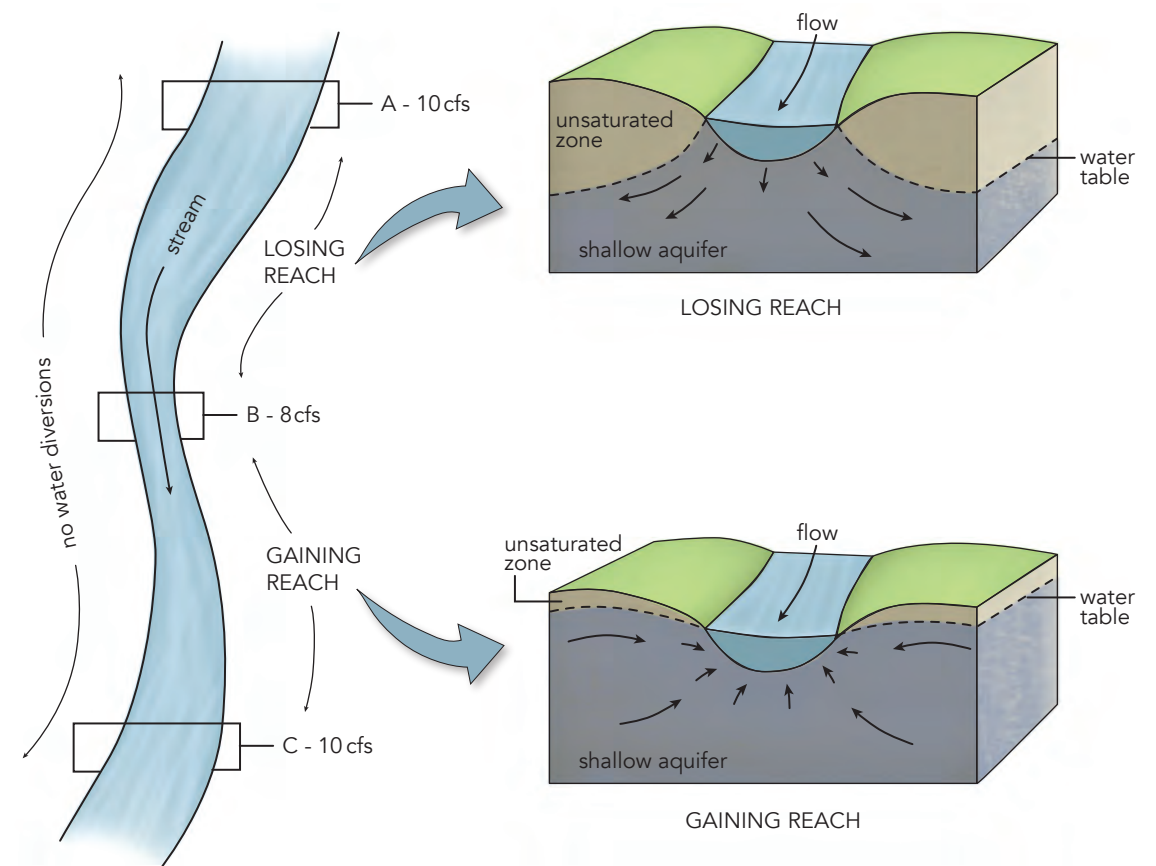
If your project seeks to pass water associated with your water rights beyond other junior diverters, then you will want to carefully consider how this downstream bypass will be monitored and/or enforced. In a stream with a watermaster, this oversight would most likely be the job of the watermaster. Without a watermaster or other entity for oversight, downstream bypass of water rights can be challenging.

Is your dedication in a gaining or losing reach?

If your hope is to transfer your water right instream, you should understand the gaining or losing nature of the stream where you are dedicating water. Streams can be characterized based on their relationship to the water table. A gaining reach is one in which the groundwater table is higher than the water surface elevation in the stream, so that as one moves downstream water moves from the ground into the channel and flow increases (absent water diversions). A losing reach is one in which the water surface elevation in the stream is above the groundwater table, so that as one moves downstream water moves from the channel into the ground and flow decreases. Many streams are composed of both gaining and losing reaches. If you are dedicating the water into a losing reach, you might want to analyze whether the dedication will have its intended benefit and the distance over which that benefit will occur. Figure 5 illustrates gaining and losing reaches.

Figure 5

Gaining and Losing Reaches



You need to be cognizant of where you are adding water through an instream transaction so that you are realistic about the quantities of water expected downstream. Streams can have reaches that gain or lose flow even when there are no artificial return flows or diversions.

1. Losing Reach: Surface flow is being lost to the groundwater and streamflow is declining by 2 cfs.
2. Gaining Reach: Surface flow is increasing by 2 cfs due to groundwater inflow.
3. Losing and Gaining Reach: Here is a stream with 10 cfs at point A, but 8 cfs at point B with no diversions, yet 10 cfs at point C with no return flow in between. Adding instream flow at Point A through a transaction will not show an increase at point B, though adding flow at Point B will more likely be detected at Point C.

When and how long do you need your water instream?

How quickly do you need the project in place?

Processing water right changes can take time. If there is an urgent need in your stream, you could consider using the State Water Board's temporary urgency change petition process

(Water Code Section 1435). Also, a forbearance agreement could be a useful short-term option while a water right change is being processed. The Decision Stream (Figure 2) walks you through some of the timing options for your project.

14. Note that Water Code Section 1707 changes also require a finding of no unreasonable effect.

Figure 6 **Instream Flow Transaction Comparison Chart**

	Temporary Urgency Change Petition * Water Code Sections: 1707 & 1435	Temporary Transfer Petition * Water Code Sections: 1707 & 1725	Long-Term Change Petition * Water Code Sections: 1707&1701 (1700,etseq)**	Forbearance Agreement*
<i>Injury</i>	"No Injury" analysis required	"No Injury" analysis required	"No Injury" analysis required	Not protected from other diverters so there is no injury
<i>CEQA</i>	Subject to CEQA	Expressly exempt from CEQA (Statutory exemption)	Subject to CEQA	If governmental approval, permit, or funding required, may be subject to CEQA
<i>Standard for Approval</i>	Must be urgent, not cause injury or unreasonable effects on fish & wildlife, and be in the public interest	Water that would have been consumptively used or stored (in the absence of the change)	No injury	No restrictions
<i>Forfeiture</i>	No forfeiture	No forfeiture	No forfeiture	Potential forfeiture of appropriative water right due to nonuse for 5 years in a row
<i>State Water Board approval</i>	Yes	Yes	Yes	No
<i>Supplemental Decree</i>	Supplemental Decree not likely required	Supplemental Decree not likely required	Seek Supplemental Decree	No Supplemental Decree required

* Depending on the situation, a practitioner may want to use a forbearance agreement in tandem with a 1707 change. Forbearance agreements and 1707 petitions are not mutually exclusive.

**Water Code Section 1701 constitutes a change to a water right (point of diversion, place of use, or purpose of use) without specifying a duration of time. This can be viewed as either a permanent change or one that is in place until subsequently changed by a future petition.



How long do you need the term of the project to last?

The duration of the project will determine how the State Water Board will evaluate the transfer or change. Different sections of the California Water Code correspond to changes of different durations.

- » Temporary urgency (<180 days), Water Code Section 1435
- » Temporary (< 1 year), Water Code Section 1725
- » Long-term (>1 year), Water Code Section 1735 or Section 1701

These Water Code sections have different requirements and analyses associated with them. Figure 6 provides an overview of the considerations for the timeframe of your project and specific requirements for each type of change. Chapter 3 discusses these options more fully.

Chapter 3
How to
Change a
Water Right
to Instream
Use



The information you gathered in Chapter 2 will now be put to good use, as you're better prepared to talk with agency staff and file a Petition for Change. A checklist for the 1707 process begins on page 37. The checklist begins with the due diligence outlined in Chapter 2, proceeds through the petition-filing process described in this chapter, and outlines the final steps you'll pursue once your petition has been approved (you can find a detailed description of these in Chapter 4).

- » Will the change initiate a new water right?
- » State Water Board staff will look to see that the existing water right was properly established, that recent beneficial use of the water has occurred in accordance with the water right, and that the change does not initiate a new right.
- » Will the change injure or unreasonably affect any legal user of water?
- » Does the change petition address CEQA requirements?
- » Will the change have any adverse effects on public trust resources?

Pre-Petition Considerations

Key Findings for a Successful Change Petition

Gathering the information the State Water Board will need in order to approve a Water Code Section 1707 petition can lead to a smooth and timely petition process. Here are some of the key questions State Water Board staff may ask to determine whether or not to approve a 1707 petition. Additional findings may be required depending on the transfer code section that applies.

Scheduling pre-consultation meeting(s) with the State Water Board

Meeting with the State Water Board's Division of Water Rights staff prior to submitting a change petition is strongly encouraged. As a first step, fill out the petition forms and provide supporting technical information in an email to the appropriate State Water Board, Division of Water Rights staff member. You can find the appropriate State Water Board staff contact by looking up the region where your project is located on the State Water Board Division of Water Rights Permitting and Licensing contact

page.¹⁵ Even if State Water Board staff are unable to meet onsite, providing them with project information via email and then discussing the project with them is highly recommended prior to submitting a change petition.

Proactive Outreach to Neighbors and Other Interested Parties

As you begin to develop your instream flow dedication, you should consider meeting early with other water right holders and interest groups in your watershed to describe your project and solicit feedback from them regarding any concerns or questions they might have. Think about including relevant staff from the local offices of natural resource agencies and the county, the watermaster (if there is one), neighboring water users, and all parties directly associated with the water right. This will help inform others about your project and ensure that you understand their questions and concerns prior to submitting the change petition. Discussing the project early in the process and taking interested parties to the project site can help all parties get on the same page sooner rather than later, and help minimize potential misunderstandings.

This “proactive outreach” could help identify issues you had not previously considered and help you shape your instream flow petition. Consider obtaining letters of support (or at least non-opposition) from key legal users of water in the watershed and from fisheries agencies, and include these support letters in the petition submittal package. The petition submittal package typically becomes the material posted on the State Water Board website during public noticing, so letters of support would help the petitioner reduce likelihood of protest from other parties. It could save you the time and money associated with “reactive outreach.”

15. http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/docs/palcontacts.pdf.

Preparing a Draft Project Description and a Draft Project Map

The petition requires a project description and project map. Examples of project descriptions and project maps for approved petitions can be found on the State Board’s website.

The project description should include:

- » A narrative summary of the project, including all of the water right changes requested
- » The purpose of the project
- » The proposed construction activities (if any)
- » The proposed operations as compared to existing operations
- » The specific actions or approvals requested of the State Water Board (to view a list of specific requirements, see California Code of Regulations, Title 23, Section 794)
- » Consider including the findings needed for your petition type (by reviewing the relevant water code section – 1435, 1701, 1725 or 1735) and providing summary documentation

The project map should include:

- » Delineation of the project site, including current and proposed places of use (for instream flow petitions, the latter will include the reach of stream you intend the project to benefit)
- » All known diversions within the vicinity of the project
- » Proposed construction projects and locations (if any)
- » Identification of the existing point of diversion (POD) (determine in advance if there has been any change to the permitted or licensed POD over time)

- » The new POD, if you are proposing to move the diversion point
- » Delineation of the stream habitat or other target conditions that the change petition intends to address

Petition Process

In order to change a water right to include instream use, the water right holder must fill out a Petition for Change form and an Environmental Information form and submit the required fees (see Applicable Fees on page 32). Both forms are available on the State Water Board Division of Water Rights website.¹⁶ At the time of the publication of this guide, the State Water Board indicated that they are considering an overhaul of the petition forms that may result in significant changes; therefore, applicants are encouraged to go to the State Water Board’s website to download the latest version of these forms immediately prior to filing a petition for change.

Petition for Change Form

The first form that you, as the water right holder (or the holder’s representative), will be filing out is the “Petition for Change” form.¹⁷

The information the form requires is discussed below.

Types of change requests

Any time that you are changing a water right for the purposes of preserving or enhancing wetlands habitat or fish and wildlife resources, either in or on the water, you are making an instream flow dedication in accordance with Water Code Section 1707. The way the water is made available for instream use (i.e., where and for how long) will determine what other types of changes are made to the water right. In most cases, you will be petitioning for an **Instream Flow Dedication** pursuant to Water Code Section 1707 in which you add fish and

Please indicate County where your project is located here:

MAIL FORM AND ATTACHMENTS TO:
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Tel: (916) 341-5300 Fax: (916) 341-5400
http://www.waterboards.ca.gov/waterrights

PETITION FOR CHANGE

Separate petitions are required for each water right. Mark all areas that apply to your proposed change(s). Incomplete forms may not be accepted. Location and area information must be provided on maps in accordance with established requirements. (Cal. Code Regs., tit. 23, § 715 et seq.) Provide attachments if necessary.

☐ Point of Diversion
Wat. Code, § 1701

☐ Point of Rediversion
Cal. Code Regs., tit. 23, § 791(e)

☐ Place of Use
Wat. Code, § 1701

☐ Purpose of Use
Wat. Code, § 1701

☐ Distribution of Storage
Cal. Code Regs., tit. 23, § 791(e)

☐ Temporary Urgency
Wat. Code, § 1435

☐ Instream Flow Dedication
Wat. Code, § 1707

☐ Waste Water
Wat. Code, § 1211

☐ Split
Cal. Code Regs., tit. 23, § 836

☐ Terms or Conditions
Cal. Code Regs., tit. 23, § 791(e)

☐ Other

Application Permit License Statement

I (we) hereby petition for change(s) noted above and described as follows:

Point of Diversion or Rediversion – Provide source name and identify points using both Public Land Survey System descriptions to 1/4-1/4 level and California Coordinate System (NAD 83).
Present:
Proposed:

Place of Use – Identify area using Public Land Survey System descriptions to 1/4-1/4 level, for irrigation, list number of acres irrigated.
Present:
Proposed:

Purpose of Use
Present:
Proposed:

Split
Provide the names, addresses, and phone numbers for all proposed water right holders.

In addition, provide a separate sheet with a table describing how the water right will be split between the water right holders: for each party list amount by direct diversion and/or storage, season of diversion, maximum annual amount, maximum diversion to offstream storage, point(s) of diversion, place(s) of use, and purpose(s) of use. Maps showing the point(s) of diversion and place of use for each party should be provided.

Distribution of Storage
Present:
Proposed:

16. http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/
17. http://www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_change.pdf

wildlife as a new **Purpose of Use** (see Water Code Section 1701) that will occur instream as a new **Place of Use** (see Water Code Section 1707). Depending on the project, there may be other changes that need to be made. For example, if part of a project involves moving a water diversion pump downstream in order to keep water instream within a stream reach containing important habitat, then the petition will include a proposed change in the **Point of Diversion** (see Water Code Section 1701).

When filling out the change petition form, it is important to check all changes that are applicable. Basic descriptions and examples of when different types of changes may be applicable are briefly described below. Specific Water Code language is available online.¹⁸

Your change petition must identify the water right that you intend to modify. As mentioned in Chapter 2, there are several different types of water rights. The way in which the water right is recorded and identified by the State Water Board differs depending on the type and status of the water right. Rights administered directly by the State Water Board—that is, post-1914 appropriative rights—are identified by an Application ID, a Permit ID, or a License ID. Registrations—which are a type of appropriative right—have a Registration and Certificate number. Rights outside the State Water Board’s permitting authority (i.e., riparian and pre-1914 appropriative rights) are identified by a Statement ID, which corresponds to the Statements of Water Diversion and Use that the owners of such rights are required to file. In most cases these identification codes are noted either in the top center or top right corner of State Water Board issued documents.

Post-1914 appropriative rights are most commonly identified by their Application ID. This is the identification code that State

Water Board staff assign to each new water right application when it is submitted. If the State Water Board issues a permit in response to the application—meaning the applicant is authorized to begin diverting and using water—the right will be assigned a Permit ID. If the State Water Board subsequently issues a license for the right—meaning it has confirmed that water is being put to beneficial use—the right will be assigned a License ID. Thus, each post-1914 appropriative right will have up to three identification numbers associated with it. Again, the Application ID is the one most commonly used to identify these rights. It is the primary code staff use to locate the hard-copy files for each right in the State’s Water Rights Archives and in the State Water Board’s electronic database (Electronic Water Rights Information Management System, or “eWRIMS”). At a minimum, you must include the Application ID in a change petition that involves a post-1914 appropriative water right. If Permit and License IDs have also been issued, it is useful to also include those identification codes in your application as they will help indicate that the water right in question is valid.

If the water right is a riparian or pre-1914 appropriative water right, it will not have a Application ID. In most cases, it should, however, have a Statement ID associated with it. This is the identification number State Water Board staff assign to the right when its owner files the initial Statement of Water Diversion and Use for the right required by Water Code Section 5100 et. seq. In practice, it is important to be aware that many owners of riparian and pre-1914 appropriative rights have not filed such statements; therefore, many such rights will not have Statement IDs associated with them. This does not necessarily mean such rights are invalid, but there could be penalties for non-reporting.

18. http://www.swrcb.ca.gov/laws_regulations/



Types of changes

(not an exhaustive list)

Point of Diversion (Water Code Section 1701): A common situation would be to move a POD downstream from its previous location to keep water instream through an important section of habitat while maintaining the existing consumptive use of the water.

Place of Use (Water Code Section 1701): The place of use will change for all 1707 petitions. At a minimum, a stream segment or wetland area will be added to the water right as a place of use. The existing place of use may also be modified or removed.

Purpose of Use (Water Code Section 1701): The purpose of use will change or expand for all 1707 petitions that don’t already have fish and wildlife, or other intended instream use, as an existing use.

Distribution of Storage (California Code of Regulations, Title 23, Section 791(e)): Relates to a release of stored water associated with an appropriative water right. This type of change could occur in cases where stored water is released to maintain instream flows during low flow periods.

Instream Flow Dedication (Water Code Section 1707): Applies to all 1707 petitions as it allows water to be used instream.

Split (California Code of Regulations, Title 23, Section 836): This splits a single existing water right into multiple water rights with two or more separate ownerships. This change cannot increase the total amount of water included in the right. A split may be desired when a conservation entity wishes to acquire a portion of an existing water right (usually to dedicate the acquired portion of the right to instream flow) from a willing water right holder who maintains the remaining portion of the right with the existing uses.

Temporary Urgency (Water Code Section 1435): Only water right holders with a demonstrated urgent need can apply for this change, which has a duration of no more than 180 days. An example of a condition that could qualify for a temporary urgency change is a particularly dry period during which fish and wildlife are imperiled: a water right that is primarily used for agriculture could, in this case, be left instream.

Other: All other types of 1707 instream transfers—such as temporary transfers under Water Code 1725 or long-term transfers under Water Code 1735—will need to check the “other” box (or use a different petition form, currently called “Petition for Change Involving Water Transfers”).

Identification of the Water Right

Getting Help On-Line or Elsewhere to Identify Your Water Right

If you do not know the identification code for the water right you intend to change, you can obtain it online from the eWRIMS database.¹⁹

You can search for water rights in this database by location, water right holder name, and water right type and use criteria. While the State Water Board aims to keep the eWRIMS database as up-to-date as possible, there are cases in which the information pertaining to a specific water right may be out-of-date or not included in the database. If no Statement of Water Diversion and Use has been submitted for a riparian or pre-1914 appropriative water right, then eWRIMS will probably not contain any information about the right. Additionally, there may be a time lag between when water rights information is provided to the State Water Board and when it is incorporated into the database. If you have difficulty accessing eWRIMS or finding information for a specific right within it, you can contact the Division of Water Rights for assistance.

The owners of all water rights, regardless of type, are required to report water use associated with their water right(s) to the State Water Board on an annual basis. Even if you already have the necessary identification information for your water right, it is worth using the eWRIMS database to look up Statements of Water Diversion and Use, reports, and other records that the State Water Board may have on file. Water rights change petitions require sufficient information to confirm that the water right has been put to recent use. This is generally the five years immediately preceding

the petition, but another time frame could be considered depending on the specifics of the situation. Copies of recent Statements of Diversion and Use and reports on file with the State Water Board are one of the most straightforward methods of showing that a water right is indeed active. If the Petitioner has not filed a report or a Statement of Water Diversion and Use for the five years preceding the change petition request, the petitioner should provide adequate information to show that the water right has been active and submit reports or Statements of Water Diversion and Use prior to submitting a change petition. In areas where a watermaster has collected and reported annual water use for the particular stream, the statement or report from the watermaster to the State Water Board will be sufficient to substantiate water use. Additional evidence of historic water use could be warranted to refute claims of non-use associated with a water right, particularly if there are concerns of potential injury claims from other water users. Historic aerial photographs (including Google Earth maps) showing irrigated pastures and other historic records such as meter records, crop receipts, stock records, and testimony from Natural Resources Conservation Service (NRCS) or UC Cooperative Extension farm advisors can be useful in determining historic water use. On average, the DWR performs Land & Water Use Surveys once a decade going back to the 1950s and generates new aerial photography as part of this effort. This data can be useful but is easier to find in DWR's regional offices than online.

Point of Diversion

The change petition requires that you identify the location of the existing POD, proposed POD, existing place of use, and proposed place

Point of Diversion or Rediversion – Provide source name and identify points using both Public Land Survey System descriptions to ¼-¼ level and California Coordinate System (NAD 83).

Present:

Proposed:

Place of Use – Identify area using Public Land Survey System descriptions to ¼-¼ level; for irrigation, list number of acres irrigated.

Present:

Proposed:

of use. Be sure to verify the location of the current POD matches the location of the POD listed on the water right; if it does not, talk with Water Board staff. You may need to file a change in POD. If the entire water right is being dedicated to instream use and no longer diverted, the proposed POD is not applicable.

Place of Use

The petitioner must also decide the reach in which instream use will occur; this is the new place of use and is also referred to as the “project area.” When identifying the project area, the petitioner should consider the intended benefit of the instream use and what is necessary to achieve that benefit. Where the effort is geographically specific and close to the existing point of diversion, it may not be necessary to protect the water from other diverters a great distance downstream (or the benefit of doing so may be marginal relative to the additional level of time, expense, and due diligence needed). On the other hand, if the target benefit is significantly downstream and/or covers a long reach of the stream, a greater number of water users will likely be affected; this will require a higher degree of analysis and effort, but the stream flow benefits may be worth it.

One helpful website for finding the coordinates associated with your proposed place of use is: <http://www.latlong.net>.

Purpose of Use

A single water right may have one or several purposes of use, such as irrigation and domestic uses. In the case of post-1914 appropriative water rights, the allowable uses are limited to those stated on the permit or license, and a change petition must be submitted any time that a use is added. When approving a petition to change the purpose of use, the State Water Board adds the proposed uses without removing the existing allowable uses by default. If the owner desires to remove existing allowable uses, this must be explicitly stated in the section of the petition addressing the proposed purpose of use.

Multiple Water Rights

A separate change petition form is required for each existing water right being modified. While multiple uses and locations of use may be assigned to a single water right, there are some conditions in which splitting a right may be useful for implementing a successful project (as described above, conservation organizations frequently utilize right splitting). The parties may want to split the right into separate rights that each of them can hold independently for various reasons (ease of management, funding, etc.). In other cases it may be desirable to split a water right in order to clearly define separate conditions to be applied to separate individual water management activities. Generally, a single

19. http://www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/index.shtml

List the quantities dedicated to instream flow in either: ☐ cubic feet per second or ☐ gallons per day.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Will any current Point of Diversion, Point of Storage, or Place of Use be abandoned? ☐ Yes ☐ No

Will the dedicated flow be diverted for consumptive use at a downstream location? ☐ Yes ☐ No

If yes, provide the source name, location coordinates, and the quantities of flow that will be diverted from the stream.

I (we) have access to the proposed point of diversion or control the proposed place of use by virtue of:

☐ ownership ☐ lease ☐ verbal agreement ☐ written agreement

If by lease or agreement, state name and address of person(s) from whom access has been obtained.

right may be split into multiple rights as long as the split does not increase the total allowable use under the original right.

Water Use

It is important to clearly state how much average flow per month (in cubic feet per second or gallons per day) is expected to be dedicated instream. Some water rights (such as those originally for irrigation use during spring and summer) would have an amount entered for only those months. It is also important to identify how consistently water is available for diversion. For a senior right, the full allocation would likely be available for diversion while the ability of a junior right to receive all or any portion of their allocation is less reliable and is more likely to fluctuate due variations in natural flow and actual water use by senior water rights holders. Recent reports and Statements of Water Diversion and Use should provide an indication of the ranges of actual diversion amounts for each month.

If all or part of the dedicated flow will be rediverted at a specific downstream location by an entity known to you, the State Water Board will need to know the details. This

situation arises primarily in relation to a water sale and/or movement of the point of diversion downstream. Note that this question is not asking whether you know of downstream water users who may or may not divert the flow once it leaves the dedication reach; this question relates only to situations where you have made a specific arrangement for rediverting downstream flow.

Other Water Users

A very important step in developing your instream dedication project is to think about the actual or perceived ways in which other water right holders might be affected by the proposed change in use of your water right. You should conduct an analysis of the priority dates of all water rights holders between your existing place of use and the downstream end of your proposed new place of use (i.e., the stream reach you intend to benefit), particularly if the scope of your 1707 dedication requires the dedicated water to move past one or more downstream water rights holders. If the water is to be transferred beyond other legal users of water, the specific quantity of water that is dedicated must reflect the average historic consumptive

use of the water right. In order to minimize the potential for protests to your Section 1707 petition, it is a good idea to communicate early and often with downstream and upstream water right holders and to have a clear understanding of the “consumed water” you hope to dedicate to instream flow.

Perceived or real injury claims could involve:

- » The availability (or lack thereof) of return flow to others if you change the use of your water right
- » Not considering or inaccurately calculating consumptive use
- » An instream flow dedication of water rights that have been lost through non-use
- » An instream dedication that enlarges the underlying water right
- » Dedication of water past other users without accounting for a losing stream reach

As part of the petition process, you may be asked to provide the names and addresses of anyone taking water from the stream between the present point of diversion and the proposed point of diversion or downstream extent of the stream reach you designate as the proposed place of use for instream flow. You also want to inform anyone else who might be affected by the proposed change. Additional parties include upstream water rights holders that are junior to the water right to be dedicated and who may have the ability to divert the water if the right is not used but would not be allowed to divert the water if it were allocated to instream use or otherwise actively “used” in accordance with any senior water right.

Monitoring Plan

In support of your proposed instream flow dedication, the State Water Board will require you to submit a monitoring plan. While there are no set requirements or guidelines regarding how your instream project should be monitored, there are many different types of monitoring that you could do. (See the Glossary for a list and definitions of monitoring types.) When developing your monitoring plan you should think about any existing gauges and/or other monitoring devices or efforts that can support your project. Be sure to propose a monitoring plan for your project that is both cost-effective and practical. At a minimum, you should be prepared to explain in your petition how you plan to conduct implementation monitoring and compliance monitoring.

Your monitoring plan will depend in large part on the specifics of your project. Implementation monitoring could be as simple as before-and-after photographs of the project site (possibly of the irrigation structures) that document that what was described in the petition was indeed implemented. Compliance monitoring could include verification over time of the quantities of water diverted before and after project implementation. This type of monitoring could involve the installation of measuring equipment at the diversion or in the reach of stream identified as the new place of use, or “spot” measurements taken at various times to document the quantities of water diverted or not diverted.

Agency partners, funders, or other interested parties might be interested in monitoring additional elements related to the project including effectiveness monitoring and trend monitoring, but whether or not you should include them in your monitoring plan should be discussed with the partners. A watershed group or other entity might be better suited to



conduct this type of monitoring.

The staff time and equipment required to install, maintain, and conduct the monitoring can be very expensive and time-intensive. If your watershed is adjudicated, consult with your watermaster about monitoring. These factors should be taken into consideration when creating a monitoring plan for your project. The results of your monitoring efforts can be used when you fill out your reports or Statement of Water Diversion and Use. Reviewing the requirements of this form might help as you develop your monitoring plan.

Applicable Fees

All change petitions submitted to the State Water Board must be accompanied by payment for the associated fees in order to be processed. These include the State Water Board's fee (per the Water Rights Fee Schedule²⁰) and the California Department of Fish and Wildlife's fee. As of November 2015, the fees are \$850 for the State Water Board and \$850 for DFW (Public Resources Code Section 10005).

20. The current Division of Water Rights Fee Schedule is available at the following website: http://www.waterboards.ca.gov/waterrights/water_issues/programs/fees/docs/fy14_15_fnl_fee_sched_sum.pdf. Note that even though a petitioner may be filling for a change pursuant to multiple Water Code sections (e.g., 1707 and 1735), they are only required to pay the fee for one type of petition (Section 1707). 21. A current list of regional contacts is available on this website: <https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=42132>.

In cases where the primary purpose of the petition is to benefit fish and wildlife resources, DFW can waive the fee by making a written determination of the benefit to fish and wildlife (Public Resources Code 10005(d)(4)). Contact your regional DFW staff lead on water rights issues to request a determination letter.²¹

Environmental Form

The [Environmental Information for Petitions form](#) (Environmental Form) is required for all water rights petitions and is used by the State Water Board to assist in determining project compliance with CEQA and to ensure that the petitioner has conducted the necessary due diligence in obtaining any applicable local, state, and federal permits. While the majority of 1707 change petitions qualify for categorical exemptions from CEQA and do not require many of the permits that would otherwise be associated with a construction-related project, it is important to make sure the project addresses any potential impacts to rare or sensitive species that may not be the focus of the project

and/or have different water needs than the target benefit. All petitions require a complete Environmental Form as part of the petition submission.

California Environmental Quality Act (CEQA) Compliance

CEQA is intended to apply only to projects that have a potentially significant negative effect on the environment. Although adding water back instream would not appear to create a negative environmental impact, California statute only exempts temporary transfers (<1 year) (Water Code Section 1725) from the requirements of CEQA. Temporary urgency changes (Water Code section 1435) and long-term changes (>1 year) (Water Code sections 1735 and 1701) are not expressly exempt. Fortunately, most instream dedications fall under one or more categorical exemptions.

Permits and Consultation with Other Agencies

The Water Code requires the petitioner to contact DFW in writing to notify them of the proposed change. The Environmental Form also asks you to provide the name and date of contact with the applicable Regional Water Board.

Additionally, in some cases local, state and federal consultation and/or permits may be needed. These likely would not be triggered specifically by petitioning for instream use but may be applicable if part of an overall project involves construction. Providing letters of support with your petition package from one or more resource agency representatives—and the watermaster, if applicable—is not required but is encouraged to help reduce the likelihood of protest.

22. Described in full in Water Code Section 1701.3-1701.4

Photographs

Photographs are a required attachment with the environmental form. Photographs must include: a) the view along the stream channel immediately downstream from each POD; (b) the view along the stream channel immediately upstream from each POD; and, (c) the location where the water subject to this water right will be used.

If you are planning to monitor the instream dedication over time, it may be worthwhile to establish photo vantage points that are easily identifiable when you are putting together your petition. This is not required by the State Water Board but may help establish specific locations that can be used to visually monitor the instream conditions over time.

Maps

Every petition must include at least one map that clearly shows the existing POD, the current or historic place(s) of use, and the new place of use (i.e., the downstream extent of the instream flow dedication reach). The map(s) should also show any proposed point of diversion or redirection and the distribution of storage reservoirs if applicable. If a POD is being retired or changed, be sure to clearly state this on the map.

Petition Review after Submittal

Once you have submitted your petition to the State Water Board, their staff will then review the petition to determine if your submission is complete.²² During this time, the State Water Board might request that you provide additional information to clarify, support, or correct the information in your petition. State Water Board staff will specify a period of time in which to provide this additional information.

In reviewing petitions for completeness, the State Water Board will consider the following:

- » Does the petition include sufficient information to demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water?
- » Does the petition include all information “reasonably available to the petitioner” regarding the extent, if any, that fish and wildlife would be negatively affected by the change? And if fish and wildlife would be negatively affected by the change, are there any proposed actions that will protect fish and wildlife in connection with the proposed change?
- » Does the petition “contain other appropriate information and be in the form required by applicable regulations”?
- » Does the petition document proof of notification of the proposed change to the Department of Fish and Wildlife?

After reviewing your petition, the State Water Board will send you a letter documenting whether or not your petition has been accepted as “complete.” If they have deemed your petition incomplete, they will either request that additional information be supplied in a given timeframe or provide an explanation regarding why your petition has not been accepted. Note that compliance with point #4 above (documentation of notifying DFW) is a requirement on the Environmental Form. As suggested above, obtaining a letter of support from DFW (and potentially other natural resource agencies) will also provide evidence to State Water Board staff that the change will have fish and wildlife benefits.

Public Notice and Review

Once your petition has been deemed complete and accepted by the State Water Board you will now begin the petition processing phase. Depending upon the circumstances and complexity of your petition, this process could take months. Having a well-documented petition should help make this phase of the petition go as quickly and smoothly as possible.

Public Notice

The State Water Board staff will follow the noticing requirements of the Water Code section that pertains to the type of petition being processed and size of the project. You should expect public noticing of your petition as a step in processing of your petition. In all cases, the petitioner is required to provide written notice of the proposed change to the DFW.

State Water Board staff may work with the petitioner to determine the best method for providing notice and developing the list of other recipients to receive notice by mail or other means.

When the petition is noticed, the State Water Board may provide a specified period of time in which individuals or groups that oppose or are concerned about your petition have an opportunity to file a protest against your proposed action. Notice periods are usually 30 days, but can be longer. Also, at any time during the process, individuals or groups can request to be designated as an “interested party” so that they receive all of the notifications from the State Water Board regarding the specified petition. This might satisfy someone who is interested in your petition but not necessarily concerned enough to file a protest.

CEQA—Notice of Exemption (NOE)

The lead agency, which may be State Water Board, will in most cases file a Notice

of Exemption (NOE) with the State Clearinghouse managed by the Office of Planning & Research (OPR). The NOE is filed within five days of issuance of the approval Order. This short document lists the project title, application number, petitioner’s name, project description, stream name, location of the POD, amount and season of diversion, existing purposes of use, and exempt status under CEQA.

Under the CEQA regulations, no specific exemption exists for instream dedications, but various exemptions under the California Code of Regulations may apply:

- » Section 15301-Existing facilities;
- » Section 15304-Minor alterations to land;
- » Section 15307 – Actions by Regulatory Agencies for Protection of Natural Resources;
- » Section 15308 – Actions by Regulatory Agencies for Protection of the Environment;
- » Section 15333 – Small Habitat Restoration Projects, and Section 15061(b)(3) – the “Common Sense” exemption.

Reasons must still be provided for why the project is exempt, such as:

- » The project will not cause significant adverse impacts to any sensitive environments and will not result in significant cumulative impacts.
- » The project will not involve the removal of healthy, mature, scenic trees.
- » The project does not involve an expansion in use beyond that which existed at the time the State Water Board began its environmental review.

For the State Water Board, the NOE form requires signatures from three employees of increasing managerial rank before the form will be submitted. This internal process can add to the CEQA review time. The NOE is publicly noticed by OPR for at least 30 days. If a potentially significant effect on the environment is found by State Water Board staff or asserted by reviewers (from the agency or the public), then the exemption may not apply. Next steps under CEQA range from a declaration of “no significant environmental impact” to the preparation of a full environmental impact report (EIR).²³

The State Board could elect to provide the specific CEQA exemption(s) applicable to the project during the public notice process, especially if the State Water Board or project proponents anticipate public opposition.

Protest

The State Water Board’s website has a good summary of what is required of anyone wishing to file a protest against a petition²⁴ as well as a copy of the protest form.²⁵ It is best to review these protest requirements to familiarize yourself with the types of things that might inspire a protest against your petition. In general, a protest must assert that your proposed action meets one of the following criteria:

- » It is not within the State Water Resources Control Board’s jurisdiction;
- » It does not best serve the public interest;
- » It would interfere with prior water rights;
- » It is contrary to law; or
- » It will have an adverse environmental impact.

23. Calif. Code of Regulations, Title 14, Div. 6, Chapter 3, Article 19 24. http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/docs/protestsubmittalinfo.pdf 25. http://www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_protest.pdf



Protest Negotiations and Division Review

If a protest or multiple protests are filed against your petition, you will then begin a process for protest negotiation. The State Water Board will instruct the petitioner and the protestant(s) to come together to discuss the nature of the protest and determine whether or not there are issues within the petition that can be addressed or clarified to resolve the protestants' concerns. This process can be very straightforward and quickly resolve concerns or clear up misunderstandings, or it might involve months of discussions that may or may not result in consensus around the issues at hand. The State Water Board often provides a timeline for protest negotiations and can provide guidance along the way to both protestants and petitioners. At the end of this period, the protestants can cancel their protest if their issues have been addressed or clarified, maintain their protest, or simply choose to stay silent on the issue, thereby abandoning their protest. The petitioner is encouraged to document the process of protest negotiations and at the end of the protest negotiation period describe in writing any unresolved issues and their position on them to the State Water Board.

26. "...a minor application shall mean any application which does not involve direct diversions in excess of three cubic-feet per second or storage in excess of 200 acre-feet per year." Water Code Section 1348.

Hearing or Field Investigation

If there are unresolved issues at the end of the protest negotiation period, then the State Water Board will use a hearing or a field investigation to garner all the information needed to determine if they will issue an order approving your petition. If the project is considered a major project, then resolution requires a hearing; if the project is a minor project, then the State Water Board can make a decision to approve or deny the petition based on a field investigation.²⁶ If there are "issues of material fact" that are still in dispute after the protest negotiation period and the petition is considered a major project, then the matter will be heard in front of the State Water Board. Scheduling and coordinating a hearing is often a lengthy process and could take months, if not years, to complete; however, protests to 1707 petitions can usually be resolved without a hearing.

Draft Order

Prior to approving a petition and during the protest negotiation process (if there is one), the State Water Board may decide to prepare a draft order, a version of the order that has not yet been approved.

This draft order can be a useful tool for the State Water Board, protestants and the petitioner. It can help clarify areas of uncertainty, specify terms and conditions important to the parties, and clear up any errors or misunderstandings regarding the project. The draft order is a useful tool not only in protest negotiations but also as a means of avoiding any motions for reconsideration, described in Chapter 4.

1707 Petition Checklist

Due Diligence

(Described in Chapter 2):

Sketch out a first draft of your project's instream objectives.

Prepare a draft map of your project depicting key components of your water rights:

- * Point(s) of diversion
- * Place(s) of use

Authorized purpose(s) of use

- * Storage locations, if any
- * Use history
- * Important stream habitat, if known
- * Other water diverters upstream and downstream and their priorities (see [eWRIMS](#))
- * Infrastructure related to the project
- * Return flow points, if any
- * Other relevant items

Determine the type of water rights involved with your project and some characteristics of your water rights and the stream (see [eWRIMS](#)):

- * Quantity of your right
- * Quality
- * Priority
- * Monitoring devices on your diversions and in the stream, if any
- * Review your recent reporting, such as your last 5 years of annual reports (permits/licenses), most recent 5-year reporting (registrations), or statements of diversion and use to cover at least the previous 5 years (pre-1914 or riparian claims).

Explore what your options are for an instream water right change (see Decision Stream for petition types and Water Code for required findings per petition type).

Analyze potential injury claims, including conducting a consumptive use analysis if necessary to establish no injury.

Reach out to agencies, other partners and key water users in the area; visit the site with them if possible to discuss your objectives and the project description.

Revisit your project's instream objectives now that you know more about your water rights and your options.

Familiarize yourself with the stream's gauges in order to help define the new instream place of use and to help shape a monitoring plan.

Make a decision whether or not to file a 1707 petition with the State Water Board.

Prepare Your Petition

(Described in Chapter 3):

Prepare a draft Project Description that includes information you have collected to allow the State Water Board to make the required findings for the petition type you will pursue.

Prepare a draft Project Map (based on your scoping map and the State Water Board map requirements for petitions).

Reach out to other water users in the vicinity and anyone else who might be interested in your project; work with State Water Board if needed to determine a list of names and addresses of any other water right owners who might be affected by your project.

Fill out the Petition for Change Form (attach Project Description).

Fill out the Environmental Form (required for all petitions).

Take photographs of your project (required as part of the Environmental Form).

Notify DFW in writing of proposed project, if applicable get letter of support from DFW.

Request fee exemption (if applicable) from DFW.

If State Water Board staff are available, have them review your draft documents.

When forms are complete, submit to State Water Board with filing fees and provide a copy of the petition to DFW.

State Water Board staff will review for completeness.

Provide the State Water Board any requested information to supplement your petition.

Once the State Water Board determines your petition package is complete, they will lead you through their process of:

Public notice

CEQA review or exemption

Technical review

Protest negotiation, if protests are received

Hearing or field investigation to resolve any remaining protest issues

Note: Petitioners may need to hire consultants to complete necessary CEQA analysis and/or technical supporting information.

Once all of the above considerations have occurred, the State Water Board will either:

Deny your Petition for Change; or

Issue an Approval Order, which likely will include terms and conditions of approval. State Water Board staff may share the Ordering section of the draft document with you and perhaps other interested parties prior to issuance.

Complete the Final Steps

(Described in Chapter 4):

If there are any issues of dispute with the Final Order, you or other interested parties can file a Petition for Reconsideration, which the State Water Board will then respond to.

Depending upon whether or not it is needed, the Order could be modified based on issues in any Petition for Reconsideration that is filed.

If your water rights are subject to an Adjudication or Decree, you might need to file the change with the court that holds that Decree.

Outreach to partners, as needed, upon finalization of your change petition.

Implement the approved change; monitor and report on the approved change as required by your approval Order.

Chapter 4

You've Got an Order: Now Your Next Steps

Congratulations! You've made it through the 1707 process with an approved order.

If you are satisfied with the order, then you are likely done with the administrative process. In some cases, an order may need to be changed and additional steps may be necessary. This section will describe those steps: filing a petition for reconsideration and filing a supplemental decree. For anyone who has finished an instream flow transaction, you will want to think about both the monitoring and the reporting of the new use of your water right.

The Order

If the State Water Board provided you with a copy of a draft order during the petition process, this document provides the basis for the final order approving the water right change. The order consists of two main sections: the recitals and the body. The recitals state background information relevant to the approved change and begin with the word "Whereas." Following the recitals is the body, which begins with the phrase: "Now, therefore, it is ordered." The body of the order describes the details of your project. You will want to review this language very carefully: once approved, it will define your water right.²⁷

27. To see copies of approved 1707 orders, visit the State Water Board site at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/. (Under the "Decision" column, click on any of the "Approval Order" links.)

Petition for Reconsideration

Ideally, the draft order helped you identify—and resolve—any remaining issues before the State Water Board distributed its final order. However, there may be instances in which the petitioner feels the order needs to be amended.

Examples of possible problems for the petitioner include:

- » Conflicting requirements over which parties will perform certain tasks;
- » Concern over requirements that could set unreasonable precedent for future instream petitions in your stream or watershed;
- » Omission of the role of an appointed watermaster for administering and monitoring the water right;
- » Issues with the date the order goes into effect (e.g., if the terms of diversion change before necessary infrastructure changes are complete); or
- » Errors of fact.

When an "obvious typographical or clerical error or oversight" is found, the State Water Board can amend or modify an order at any

time without having to provide notice or a hearing.

Additionally, as an administrative remedy, an interested party who is not in agreement with the order may petition the State Water Board for reconsideration no later than 30 days from the date of adoption. The State Water Board can also order reconsideration on its own motion within 30 days; this option can save the legal costs and time required for the Petitioner to file the necessary paperwork.

In either case, the legal basis for reconsideration must be met:

- » Irregularity in the proceedings, or any ruling or abuse of discretion by which the person was prevented from having a fair hearing;
- » The order is not supported by substantial evidence;
- » There is relevant evidence, which in the exercise of reasonable diligence, could not have been produced; or
- » Error in law.

The State Water Board is required to affirm or deny petitions for reconsideration not later than 90 days from the date when the State Water Board adopts the order. It may send a notice to all interested persons and, if needed, hold a hearing to receive relevant, additional evidence during the review period. It is not always possible for State Water Board staff to meet the 90-day deadline and the process can take longer.

A petition for reconsideration must contain specific information, including: a) the reason the action was inappropriate or improper, b)

the specific action the petitioner requests, and c) a statement that copies of the petition and any accompanying materials have been sent to all interested parties. You might also consider submitting an edited version of the order with your suggested revisions so the requested changes are clear.

Once you have submitted a petition for reconsideration, follow up with your State Water Board staff contact to see if any further information may be helpful. The State Water Board, usually through its executive director, will make a finding to support or deny the petition. However, the State Water Board itself may take action if the petition raises questions that it wishes to address or requires an evidentiary hearing. Even if the petition is denied because it does not meet the legal basis for reconsideration, the original order may still be amended by the executive director to address one or more of the raised issues if the change improves the order. An amended order has “the same force and effect as an original order.”²⁸

Supplemental Decree

Water rights established under a court decree through adjudication can be transferred for instream use under the Section 1707 process. A supplemental decree to modify any rights in the decree may be entered by the court having the appropriate jurisdiction over the decreed rights. This action can be taken upon motion by the State Water Board or by any party with a vested water right.²⁹ While not always required, supplemental decrees provide the court, other water users, and especially the watermaster with clarity about the instream right created by the

approved order. The watermaster assigned by the court to administer the decree can now legally shepherd the previous consumptive use portion of the water right past downstream diverters with lower priorities.³⁰

Monitoring and Oversight

Your monitoring plan will outline the steps necessary for documenting your instream use of water (see Chapter 3 for more information about monitoring). This process could be as simple as taking photographs annually or could involve installing and reading stream gauges and diversion monitoring devices. Monitoring responsibilities may fall to another agency or entity, but you will want to be sure that any information you need for reporting purposes is being collected.

In some cases, orders identify either a watermaster or another third party to monitor or oversee the instream flow transfer. It will be important to communicate with this party around the instream use of the water in order to establish the routine of monitoring, particularly in the first few years of the transfer.

Reporting

After a petition has been approved and an order issued, the water right holder should continue to file documentation with the State Water Board for the water used instream. Permittees and licensees should abide by the terms and conditions of their permit or license and file a Progress Report by Permittee or Report of Licensee on the schedule provided by the State Water Board. Water users diverting under other basis of right (e.g., riparian or pre-1914) should continue to file Statements of Water Diversion and Use with the State Water Board.



Stream reach before and after a flow release.

Water use reporting requirements change over time so be sure to check the State Water Board website or other references for the most recent reporting requirements for your water use type.

More information is available on the State Water Board website and in Chapter 6:

- » Water Use Reporting
- » Licensing Program
- » Statement of Water Diversion and Use Program
- » Frequently Asked Questions

28. Water Code Section 1123. For more information about the process or issues associated with a motion for reconsideration, see Water Code sections 1122-1124 and California Code of Regulations Title 23, sections 768 et. seq.

29. To see examples of Supplemental Decrees for 1707 orders, go to the State Water Board's website: http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/docs/frenchcreek_supp.pdf and http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/docs/shastariver_supp.pdf

30. For more information on supplemental decrees, see Water Code section 1740.

CHAPTER 5

Case Studies



We want to share with you some actual examples of recent instream transactions that range from fairly simple to quite complex. Each case study has something unique to offer, such as a key concept, scenario, approach, outcome, or lessons learned. Due to the diversity of settings in California no two instream transactions will be alike, but we hope these case studies have enough similarities to help provide insights into your proposed transaction.

Instream transaction examples, adding as beneficial use, from simple to complex:

French Creek: Adding Instream Flow as a Beneficial Use

Shasta Big Springs Ranch: Using Water Rights 30 Miles Downstream

Instream transaction examples, also adding new off-stream water storage projects:

Whitethorn School: Tank Storage for Dry Season Flows

Pine Gulch Creek: Agricultural Ponds for Dry Season Flows

French Creek: Adding Instream Flow as a Beneficial Use

French Creek, Scott River, Klamath River Basin / Siskiyou County

Scott River Water Trust · 2009-2011

Key Concepts:

Permissive Section 1707 Dedication

Scenario:

The Scott River Water Trust wanted to test a “simple” case for the 1707 process by simply adding “preservation and enhancement of fish and wildlife resources” to an existing pre-1914 appropriative water right on French Creek, which supports quality coho salmon rearing habitat. This change, referred to as a permissive 1707 dedication, would allow the Scott River Water Trust to lease the irrigation water right for more than 5 consecutive years without running the risk of the right being considered abandoned or forfeited by the State Water Board.

Approach:

Several conditions made this approach possible. As ordered by the Superior Court after the French Creek Decree became final in 1958, Watermaster Service (under the California Department of Water Resources) had overseen this water right and all others in French Creek for many decades. As a result, the water right amount and its active use were easy to validate. The point of diversion (POD) was the last one on the stream and was ½ mile below an existing DWR gage to document water availability. Because there was no expectation for instream benefit to extend beyond the confluence with the Scott River, there was no risk of “injury” to any downstream water user. In addition, years of fish use, habitat, and water quality data were available for use in demonstrating the ecological benefit of additional streamflow to this stream. This project was therefore considered by the Scott River Water Trust to be a “best case scenario” to demonstrate a permissive Section 1700 dedication.

Outcome:

Final Order WR 2011-001-EXEC was issued on Jan. 21, 2011, following the filing of Petition on Feb. 4, 2009, issuance of the original Order on Feb. 25, 2010, and submittal of a Motion for Reconsideration on March 29, 2010. Although the permissive Section 1707 dedication was ultimately successful, the time and expense to complete this “simple” change were significantly higher than expected. The total cost of this demonstration case was \$30,000, not including contributed time from the Water Trust staff and its private attorney beyond the depleted budget. A Motion for Reconsideration was deemed necessary to help reconcile conflicts in expectations among the parties, including the Watermaster, when the original Order was issued. Many uncertainties among all of the

players and with the 1707 process at that time contributed to the lengthy, expensive process for this “simple” project. Better understandings and having this completed 1707 as a template should help future 1707s for this stream and others in the Scott River watershed. With completion, this water right is leased by the Water Trust each summer as thousands of juvenile coho salmon are always present.

Lessons Learned:

- » It is very important to meet with the various agency and landowner parties on-site, if at all possible, at the start of the process to clarify project expectations and avoid unnecessary procedural complications.
- » Determine if the POD is still at the original site on the water right. In this case, it had been moved decades before due to flood damage; this historic alteration in location extended the process due to the State Water Board asking to also add a Change in Point of Diversion, which is another process.
- » Costs will likely be reduced by using a previously completed petition as a guide, and using a water attorney, biologist and engineer only when really needed. One example is to seek a short letter of support from a fishery agency representative rather than pay a biologist for a formal Biological Justification.
- » Reasonable expectations for monitoring an instream dedication can be worked out with the State Water Board in order to not be a technical or financial burden on the water user.

Additional Details:

State Water Board’s [Instream Flow Dedication webpage](#) listing for Klamath River: John Spencer

Shasta Big Springs Ranch: Using Water Rights 30 Miles Downstream

Shasta River, Klamath River Basin /
Siskiyou County

The Nature Conservancy · 2012-2014

Key Concepts:

Consumptive use analysis; monitoring
downstream bypass of dedicated water rights;
avoiding injury

Scenario:

In 2005 and 2009, The Nature Conservancy (TNC) purchased two adjacent ranches along the Shasta River with high priority water rights. TNC bought these ranches because of the important salmon spawning and rearing habitat in this area of the Shasta River. Salmon and steelhead spawn and rear in the vicinity of the properties and benefit during certain times of the year from these water rights being left instream. In addition to the salmon habitat in the vicinity of the two ranches, there is also critical habitat in the Shasta River canyon, some 30 miles downstream. In many years, particularly in dry years, migrating adult

The “consumed” portion of a water right is the amount of the water right that is evaporated, taken up by crops, consumed by livestock, or otherwise removed from, and not returned to, the stream (see Figure 3). The non-consumed water is the amount that returns to the stream either as runoff or as seepage into groundwater and is available for use by downstream water users. To avoid injury to other water users, only the consumed portion of any water right can be transferred past other water rights.



Chinook salmon have been plagued by low flows in the Shasta River canyon in September, as they begin their journey to their spawning habitat. Leaving these water rights instream, and having the consumed portion bypass other downstream diversions for some 30 miles during late September, improves flow and temperatures, reducing stress to migrating salmon.

Approach:

In 2012 TNC filed 1707 petitions on these water rights so that, during critical times for fish, the consumed portion of the water rights will move past downstream users to benefit salmon and steelhead in the Shasta River some 30 miles downstream. In order to gain State Water Board approval of these 1707 petitions, it was critical to validate that downstream water right holders would not be injured by moving the consumed portion of TNC water rights instream past their diversions. In order to ensure that this downstream bypass did not cause injury to other legal water users, TNC hired a licensed engineer to estimate the “consumed” portion of these water rights. This task was made easier by the fact that the Shasta

River is adjudicated and has a watermaster who oversees the use of water rights in the basin. The Scott and Shasta Valleys Watermaster District oversees this instream flow transfer under agreement to a Compliance Plan developed as part of the 1707 Order that spells out how these rights are monitored in the downstream location.

Outcome:

With the approval of these 1707 petitions in 2014, the consumed portion of these water rights can now be put to beneficial use for salmon some 30 miles downstream in the new place of use, improving habitat during periods of adult spawning migration. The public notice process for these petitions generated robust discussions between TNC and other water users in the Shasta River. This community dialogue served as a great opportunity for information sharing around the use of water rights for instream flow. Central to these discussions was the concept that TNC’s desire to add instream flow as a beneficial use would not injure any other legal user of water; as such only the consumed portion of the rights could be transferred downstream.

Lessons Learned:

» Assuring downstream water right holders and the community at large that TNC’s changes to the water rights would not result in injury to other users was critical to the success of this project. The main element of determining the potential for injury was to clearly identify the portion of the water right that is actually consumed, and only seek to dedicate to instream flow this consumed water that would not otherwise be available for diversion by other users. It is therefore important to decide how you will determine the “consumptive use” portion of your water

rights. Consumptive use of applied irrigation water varies depending upon the crops grown, the soils in the region, the climate and possibly other variables. Technical assistance may be necessary to determine consumptive use; your local UC Cooperative Extension (UCCE) Crop Advisor might be helpful with determining your consumptive use.

- » Reach out to other water users in your stream reach, particularly those water users downstream who are in the reach of your instream transfer. Once you have clearly defined your 1707 project area, meet with neighboring water users and possibly other interests groups, such as the local Farm Bureau, Resource Conservation District, and County officials. You will need to ensure no injury to other water users, so you will want to carefully develop your 1707 project so that it will not injure downstream water users.
- » Listen to other water user’s concerns. There could be elements of your project that do affect their use of water and you will want to address all legitimate concerns before you submit your petition to the State Board.
- » Develop a monitoring plan that works. You will need to describe how you, or others, will monitor the instream flow transfer, particularly if you want the previously consumed portion of your water rights bypassed beyond downstream diverters. If there is a watermaster in your watershed, then this will likely be the job of the watermaster. You could work with local partners to develop and implement a monitoring plan.

Additional Details:

State Water Board’s [Instream Flow Dedication webpage](#) listing for the Klamath River Watershed: The Nature Conservancy Adjudicated Water Rights J00014-J00021

Whitethorn School: Tank Storage for Dry Season Flows

Mattole River Watershed/
Humboldt County

Sanctuary Forest, Trout Unlimited, &
Center Ecosystem Management and
Restoration (CEMAR), leads · 2014

Key Concepts:

Permissive Section 1707 Dedication, Tank
Storage, Forbearance Agreement, Rotations

Scenario:

Whitethorn School diverted water year-round from the Mattole River, near some of the best coho habitat in the mainstem. In dry years, the school's diversion has had a big impact on the river. The school at times was diverting from 20-100% of the flow, resulting in stretches of disconnected pools and low dissolved oxygen levels. Although the total quantity of water used by the school was relatively small, impacts on streamflow for the threatened coho and steelhead populations were significant.



Approach:

The goal of the project was to change the timing of Whitethorn School's water diversion in order to improve conditions for juvenile salmon and steelhead survival during the driest months of the year. This was done in two ways. First, the school agreed to rotate diversions with other water users when stream flows drop below certain thresholds, lessening the combined impact of water diversions occurring in the stream reach at any one time. Second, the school agreed to turn off its diversion pump completely during the summer/ fall low flow season. This involved constructing tanks near the school to store 80,000 gallons of water; the tanks are filled during the winter season to supply the school with water in the summer and fall. The project included a new appropriative water right authorizing the tank storage and an amendment to the school's existing license to add instream flow as a purpose of use. To ensure that streamflow benefit is maintained over time, the school also signed a binding 15-year forbearance agreement with Sanctuary Forest and a separate 20-year agreement with the State Coastal Conservancy.

Outcome:

The total streamflow improvement is 10 gallons per minute over an approximate 4.8 mile stream reach. Although not a huge amount of water, the streamflow from this project—in concert with similar projects undertaken by two adjacent landowners—is enough to maintain pool connectivity and improve dissolved oxygen levels needed for juvenile salmon and steelhead survival. Whitethorn School is demonstrating water storage and forbearance for the students, staff, families, and the community and is encouraging water conservation throughout the watershed.



Lessons Learned:

While we are accustomed to thinking of Water Code Section 1707 as a means of protecting water rights instream, it can also fulfill a complementary function of ensuring that a landowner's water management changes do not harm their existing water rights. Since the project required the school to apply for a new water right, there was a risk that the school's old water right would be subject to forfeiture. This would have caused the school to lose its existing priority date preventing them from participating in the project. To avoid this, we petitioned to add instream use under Section 1707 as a purpose of use of the old right. This clarifies that the water being left instream is being "used" to support fish and wildlife, and protects the school from any claim that the old right has been lost.

There is tremendous value in working with schools and other public institutions to demonstrate creative solutions to water use challenges, and to integrate that work with educational components (e.g., programming, materials, tours). These programs provide educational value to both the school children and the community at large. There is significant potential for future efforts using similar approaches, and it is exciting to see programs that provide resources in this area (e.g., Drought Response Outreach Program for Schools).

Additional Details:

» State Water Board's [Instream Flow Dedication webpage](#) listing for Mattole River Watershed: Southern Humboldt Unified School District

» Video : <https://vimeo.com/128927854>

Pine Gulch Creek: Agricultural Ponds for Dry Season Flows

Pine Gulch Creek, Bolinas Lagoon Watershed / Marin County

Marin Resource Conservation District, lead · 2002-2015

Key Concepts:

Section 1707 Dedication of Riparian Rights, Pond Storage and Forbearance, Rotation of Diversion

Scenario:

Pine Gulch Creek flows from Point Reyes National Seashore to the Bolinas Lagoon and provides critical habitat for coho salmon and steelhead. Agricultural water diversions along the creek were impacting streamflow during the dry season, reducing flows by up to 100% in the lower 3 km of the stream during the dry season. Upstream reaches are unimpaired.



Approach:

The goal of the project was to change the timing of water diversion for three of the largest farms along the creek in order to improve conditions for juvenile salmon and steelhead survival during the low flow season. The project enhances summer flows by utilizing wet season appropriative diversions in lieu of dry season riparian diversions. Star Route Farms, Paradise Valley Farms, and Martinelli Family Ranch obtained new appropriative rights for winter diversion, agreed to limit their spring riparian diversions, and dedicated their entire commercial riparian rights between July 1 and December 15 to instream flow pursuant to Water Code Section 1707. To store wet season water, a series of five ponds is being constructed with a combined capacity of 52.6 acre-feet.

Outcome:

Pond construction began in June 2015. Natural streamflow will be restored in the lower 3 km stream reach from July to October. In addition, a pumping plan has been put in place to ensure that, at all times, maximum pumping rates do not exceed more than 10% of the average daily flow and that instantaneous withdrawal rates do not exceed 15% of stream flow for the majority of the year.

Lessons Learned:

- » The regulatory structure did not lend itself to a project like this; there was no correct box to put this project into. Every step of the way had to be figured out.
- » Irrigation calculations must expect changes to crops types which will alter water demand from year to year. Consider fallow field and potential demands in subsequent years. Consider climate change and drought.



- » Water permits must include places of water use where fields may currently be fallow.
- » Alternatives Analysis must examine ALL possible pond locations and require adequate justification of each alternative siting. Avoid wetland areas to the extent possible.
- » If ponds are developed in wetland areas, be prepared to mitigate for loss.
- » Wetland certifications have a life of five years. If one's project expands outside of this timeframe, budget for necessary re-certifications and expect changes in wetland determinations which may require more (or less) mitigation.
- » Expect CEQA and permit modifications as the project develops. As the project is vetted through each agency, there will likely be changes made to design plans and maintenance and monitoring requirements

which will require permit modifications.

- » Plan and budget for construction modifications due to unforeseen site conditions (wet soils, archeological and biological findings).

Additional Details:

State Water Board's [Instream Flow Dedication webpage](#) for Bolinas Lagoon Watershed: Warren T Weber, Paradise Valley Ranch and New Land Fund, Pine Gulch Creek Watershed Enhancement Project

<http://www.marinrcd.org/pine-gulch/>

<http://www.marinij.com/20150623/marin-farmers-agree-not-to-pump-water-out-of-creek-to-help-endangered-fish>

Chapter 6

Additional Resources



Here are some useful sources of information for your instream dedication project. Some were cited in previous chapters but others were not. Please note that website addresses may change over time.

State Water Resources Control Board/ Division of Water Rights

Instream Dedication Website

www.waterboards.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/index.shtml

Water Rights Process

www.waterboards.ca.gov/waterrights/board_info/water_rights_process.shtml

Petition Information and Map Requirements: Post-1914 Appropriative and Adjudicated Rights

<https://govt.westlaw.com/calregs/Document/IB9C38FC0D45A11DEA95CA4428E-C25FA0?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=%28sc.Default%29s>

Water Right Change Petition

www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_change.pdf

Water Use Reporting

www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/water_use.shtml

Process for Water Right Licensing

www.swrcb.ca.gov/waterrights/water_issues/programs/applications/docs/licensing.pdf

Statement of Water Diversion and Use Program

www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/

Frequently Asked Questions about Diversion Use www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/faqs.shtml

Electronic Water Rights Information

Management System (eWRIMS) Database www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/index.shtml

Approved 1707 orders www.waterboards.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/

Division of Water Rights Fee Schedule

www.waterboards.ca.gov/waterrights/water_issues/programs/fees/docs/fy14_15_fnl_fee_sched_sum.pdf

Water Right Protest Petition Information

www.waterboards.ca.gov/waterrights/water_issues/programs/applications/docs/protestsubmittalinfo.pdf

Water Right Protest Form

www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_protest.pdf

Supplemental Decree Examples for 1707 Order

www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/docs/frenchcreek_supp.pdf www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/docs/shastariver_supp.pdf

Water Transfers Program

www.waterboards.ca.gov/waterrights/water_issues/programs/water_transfers/

Instream Flow Study Recommendations

www.waterboards.ca.gov/waterrights/water_issues/programs/instream_recommendations/index.shtml

Policy for Maintaining Flows in Northern California Coastal Streams

www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/

Map of Adjudicated Streams in California

http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/

Consumptive Use Information

www.cimis.water.ca.gov/

Agency Contacts and Consultants

www.waterboards.ca.gov/waterrights/board_info/contacts.shtml

www.waterboards.ca.gov/waterrights/water_issues/programs/applications/docs/palcontacts.pdf

Water Law

Statutory Water Rights Law, and Related Water Code (as amended) California Water Boards. 2015 www.waterboards.ca.gov/laws_regulations/docs/wrlaws.pdf

California Water Code http://www.leginfo.ca.gov/html/wat_table_of_contents.html

California Code of Regulations

www.waterboards.ca.gov/laws_regulations/docs/wrregs.pdf

The California Law of Water Rights. Hutchins, Wells. A. 1956. State Engineer of California, Sacramento. www.foothillwater.com/pages/CalWater.html

www.worldcat.org/title/california-law-of-water-rights/oclc/609828033 [library copy]

"Irrigation Water Rights in California".

Hutchins, Wells A. 1956. Univ. of California, Div. of Agricultural Sciences, Circular 452, 55 p. www.worldcat.org/title/irrigation-water-rights-in-california/oclc/9669912 [library copy]

California Water II

Littleworth, Arthur and Eric L. Garner. 2007. Solano Press. <http://solano.com/processxml.asp?tid=WA2&StyleSheet=title.xml>

"Information Pertaining to Water Rights in California" State Water Resources Control Board. 2000 www.swrcb.ca.gov/publications_forms/publications/general/docs/l577.pdf

"A Primer on California Water Rights"

Gary Sawyers, Esq. 2005 http://aic.ucdavis.edu/events/outlook05/Sawyer_primer.pdf

"Layperson's Guide to Water Rights Law"

Water Education Foundation. Updated 2013. 28 p. www.watereducation.org/publication/laypersons-guide-water-rights-law

California Department of Fish and Wildlife

DFW Instream Flow Program
www.dfg.ca.gov/water/instream_flow.html

Regional DFW Contacts
PDF Located at the bottom of the webpage labeled CDFW Water Rights Contacts List
www.dfg.ca.gov/water/water_rights.html

Filing Fee Exemption: Public Resources Code Section 10005(d)(4)
www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=09001-10000&file=10000-10005

Streamflow Data Sources

California Dept. of Water Resources (DWR): California Water Data Library
www.water.ca.gov/waterdatalibrary/

U.S. Geological Survey (USGS): Streamflow Data for California
<http://waterdata.usgs.gov/ca/nwis>

Center for Ecosystem Management and Restoration Streamflow Data Center
<http://cemar.org/streamflow-data.html>

Instream Flow Approaches in California

American Rivers, Sierra Water Trust Project
www.americanrivers.org/initiative/water-supply/projects/sierra-water-trust/

“Water Dedications for Healthy Streams & Rivers: Protecting instream flows through voluntary water dedications.” Fact Sheet #1.
“Stream Flow: Why should we measure it & how do we do it?” Fact Sheet #2.

Marin Resource Conservation District, Pine

Gulch Creek Water Rights and Watershed Restoration Project
www.marinrcd.org/pine-gulch/

Russian River Coho Water Resources Partnership
<http://cohopartnership.org/index.html>

Sanctuary Forest, Water Stewardship
www.sanctuaryforest.org/programs/water-stewardship/

Scott River Water Trust
www.scottwatertrust.org/

The Nature Conservancy (TNC), Shasta Big Springs Ranch www.nature.org/ourinitiatives/regions/northamerica/unitedstates/california/explore/shasta-big-springs-ranch-protected.xml

Trout Unlimited, Coastal Streamflow Stewardship Project
www.tu.org/tu-projects/california-coastal-streamflow-stewardship-project

Trout Unlimited, Water and Wine
www.tu.org/tu-projects/water-and-wine

Rainfall Capture Efforts in California

OAEC, Occidental Arts and Ecology Center WATER Institute, Roofwater Harvesting Work
<http://oaec.org/publications/roofwater-harvesting-in-california-obstacles-and-opportunities/>

Salmon Creek Water Conservation Program, Roofwater Harvesting for Coastal California Communities http://salmoncreekwater.org/cs/Roofwater_Harvesting.pdf

UC Cooperative Extension, Rainfall Capture and Storage for Marin Agriculture. Authors: Lisa Bush and David J. Lewis. 2010
http://ucanr.org/sites/Grown_in_Marin/files/115500.pdf

Instream Flow Approaches in the Western United States

Columbia Basin Water Transactions Program
www.cbwtp.org/jsp/cbwtp/index.jsp

The Freshwater Trust: Oregon Flow Restoration Program www.thefreshwatertrust.org/fixing-rivers/flow-restoration/

Trout Unlimited, Western Water Project
www.tu.org/tu-programs/western-water

“Decades Down the Road: An Analysis of Instream Flow Programs in Colorado and the Western US”.

Author: Sasha Charney. Colorado Water Conservation Board. 2005
<http://cweb.state.co.us/public-information/publications/documents/reportsstudies/isfcompstudyfinalrpt.pdf>

“Liquid Assets: Protecting and Restoring the West’s Rivers and Wetlands through Environmental Water Transactions”.
Author: Steve Malloch, Trout Unlimited. 2005
www.santafewatershed.org/sfwa/wp-content/uploads/2011/12/Trout-Unlimited-Liquid-Assets.pdf

“Water Acquisition Handbook: A Guide to Acquiring Water for the Environment in California”.
Author: Donald B. Mooney and Marsha A. Burch. The Trust for Public Land (TPL). 2005
www.tpl.org/publications/books-reports/california-water-acquisition.html

“Innovative Water Transfer Tools for Regional Adaptation to Climate Change: A Guidebook Series”.
Author: Dr. Bonnie Colby and colleagues, Univ. of Arizona. 2009-2013.
www.climas.arizona.edu/research/innovative-water-transfer-tools-regional-adaptation-climate-change



State Water and Drought Plans

California Water Action Plan (2014). California Resources Agency.
http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf

California Water Plan (2013). California Dept. of Water Resources.
www.waterplan.water.ca.gov/cwpu2013/final/index.cfm

California Drought Contingency Plan (2010). California Dept. of Water Resources.
www.water.ca.gov/waterconditions/docs/Final_CA_Drought_Contingency_Plan-11-18-2010a.pdf

State and Federal Salmon, Steelhead, and Trout Recovery Plans

National Oceanic and Atmospheric Administration—Fisheries

www.nmfs.noaa.gov/pr/recovery/plans.htm

www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/index.html



Chinook Salmon, California Coast
www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/southern_oregon_northern_california/cc_chinook_recovery_outline_final_may_2007.pdf

Coho Salmon, South Oregon/North California Coast
www.nmfs.noaa.gov/pr/recovery/plans/cohosalmon_soncc.pdf

Coho Salmon, Central California Coast
www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/north_central_california_coast/central_california_coast_coho_ccc_coho_salmon_esu_recovery_plan_vol_i_sept_2012.pdf

Salmonids, Central Valley
www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/california_central_valley/california_central_valley_recovery_plan_documents.html

Steelhead, Northern California
www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/southern_oregon_northern_california/nc_steelhead_

recovery_outline_final_may_2007.pdf

Steelhead, South-Central Coast
www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/south_central_southern_california/2013_scccs_recoveryplan_final.pdf

Steelhead, Southern California
www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/south_central_southern_california/southern_california_steelhead_recovery_plan_executive_summary_012712.pdf

U.S. Fish and Wildlife Service

Lahontan Cutthroat Trout
http://ecos.fws.gov/docs/recovery_plan/950130.pdf

Pauite Cutthroat Trout
http://ecos.fws.gov/docs/recovery_plan/040910.pdf

California Department of Fish and Wildlife

Coho Salmon, California: California Coho Recovery Strategy. 2004 www.dfg.ca.gov/fish/documents/SAL_SH/SAL_Coho_Recovery/ReportToCommission_2004/CohoRecoveryStrategy.pdf

Funding Possibilities

Grant sources, types and availability can vary quite a bit from year to year. Be persistent and creative.

Public:

California Department of Fish and Wildlife
www.wildlife.ca.gov/Grants

California Department of Food and Agriculture: State Water Efficiency and Enhancement Program www.cdfa.ca.gov/EnvironmentalStewardship/WEED.html

California Department of Water Resources
www.water.ca.gov/funding/

California State Coastal Conservancy
<http://scc.ca.gov/category/grants/>

California Wildlife Conservation Board
www.wcb.ca.gov/Applications ; <https://wcb.ca.gov/Programs>

National Oceanic and Atmospheric Administration- NOAA Fisheries Restoration Center www.habitat.noaa.gov/funding/index.html

Natural Resource Conservation Service
www.nrcs.usda.gov/wps/portal/nrcs/main/ca/programs/financial/

State Water Resources Control Board / Regional Water Quality Control Board

Nonpoint Source: www.waterboards.ca.gov/water_issues/programs/nps/solicitation_notice.shtml

Drought Response Outreach Program for Schools: www.swrcb.ca.gov/water_issues/programs/grants_loans/drops/

U.S. Fish and Wildlife Service Endangered Species: www.fws.gov/endangered/grants/grant-programs.html

Private:

Bella Vista Foundation: Ecosystem Restoration Program www.pfs-llc.net/foundations/bella-vista-foundation/grantseekers

Bonneville Environmental Foundation: Water Restoration Program www.b-e-f.org/environmental-products/water-restoration-certificates/

Fish America Foundation: www.fishamerica.org/grants/

National Fish and Wildlife Foundation (NFWF):

Bring Back the Natives / More Fish:
www.nfwf.org/bbn/Pages/home.aspx#.Vbv5E7VLWVM

Klamath River Coho Enhancement Fund:
www.nfwf.org/klamathriver/Pages/home.aspx#.Vbv50bVLWVM

Lahontan Cutthroat Trout: www.nfwf.org/lct/Pages/home.aspx#.Vbv6WrVLWVN

Lower Klamath River: www.nfwf.org/lowerklamath/Pages/home.aspx#.Vbv6j7VLWVM

PG&E's Nature Restoration Trust:
www.nfwf.org/nrt/Pages/home.aspx#.Vbv7D7VLWVM

Russian River Coho: www.nfwf.org/coho/Pages/home.aspx#.Vbv7a7VLWVM

Western Water Program: www.nfwf.org/wwp/Pages/home.aspx#.Vbv7yLVLWVM

Glossary

Acquisition: “Obtaining a fee interest or any other interest in real property, including, easements, leases, water, water rights, or interest in water obtained for the purposes of instream flows and development rights.” (CWC §79702(a))

Acre-foot (AF): A measurement of the volume of water, equaling one acre covered to a depth of one foot; equal to 326,851 gallons or 43,560 cubic feet. On a per day basis, one acre-foot is equivalent to 1.98 cubic feet per second (cfs).

Adjudication: The judicial process through which the existence of a water right is confirmed by court decree.

Amount Diverted: The total amount taken from a water source over a specified period of time. Examples of units for the amount diverted are gallons, cubic feet, or acre-feet over a specific period of time.

Appropriative Water Rights: See Prior Appropriation Doctrine.

Beneficial Use: A reasonable quantity of water applied to a non-wasteful use. Potential beneficial use options as described by the California Code of Regulations (CCR) Sections 659 through 672, title 23 includes water for Domestic Use, Irrigation, Power Use, Frost Protection Use, Heat Protection Use, Municipal Use, Mining Use, Industrial Use, Fish and Wildlife Protection and Enhancement, Aquaculture Use, Recreational Use, Water Quality Use, and Stockwatering Use. Definitions of each of the beneficial uses listed above can be found in Section B1 of the Division booklet: How to File an Application. Beneficial use does not include waste or unreasonable use, unreasonable method of use or unreasonable method of diversion of water.

Consumptive Use: The amount of water which has been consumed through use by evapotranspiration, percolated underground, or been otherwise removed from use in the downstream water supply as a result of direct diversion or diversion to storage.

Cubic feet per second (cfs): A measurement of the rate of water flow, equaling 450 gallons per minute, or 646,320 gallons per day, or 1.98 acre-feet per day.

Decree: An official document issued by a court or through statute defining the priority, amount, use, and location of the water right.

Dedication: Refers to an instream flow transfer through the Water Code Section 1707 process; dedication may be short-term or long-term.

Diversion: Taking water by gravity or pumping from a surface stream or subterranean stream flowing through a known and definite channel, or other body of surface water, into a canal, pipeline, or other conduit, and includes impoundment of water in a reservoir. (CWC § 5100)

Diversion Rate: A unit of measurement that describes that quantifies the amount of water taken from a stream or other water body. Examples of diversion rate units are: gallons per minute, gallons per day, cubic feet per second, and acre-feet per day.

Due Diligence: The care that a reasonable person or organization exercises to avoid harm to other persons or their property.

Evapotranspiration (ET): The amount of water transpired by plants, retained in plant tissues, and evaporated from plant tissues and surrounding soil surfaces. (Also referred to as Evapotranspiration of Applied Water [ETAW].)

Forbearance: Refraining from doing something that one has a legal right to do; in this case, refraining from using a legal water right.

Forbearance Agreement: A forbearance agreement is a legally-binding private agreement that sets forth the responsibilities between the project proponent and the landowner and/or water user. It does not require the approval of the State Water Board.

Forfeiture: There is a potential forfeiture or revocation of an appropriative water right with 5 years of consecutive non-use. This time period can be extended in situations of drought or other conditions that prevent diversion from occurring that are beyond the control of the water right holder. A riparian right is not lost by non-use.

Gaining reach: A gaining reach is one in which the water surface elevation in the stream is lower than the level of the surrounding water table. As a result, water moves from the ground into the channel.

Injury: See No Injury Rule.

Instream dedication: Refers to an instream flow transaction that includes a water right change in accordance with Water Code section 1707; this results in the transaction being recognized by the State Water Board. In this Guide, we use dedication to refer to transactions of any duration that include Section 1707 changes, not just permanent changes.

Instream flows: A specific streamflow, measured in cubic feet per second, at a particular location for a defined time, and typically following seasonal variations. (CWC §79702(m))

Instream transaction: An action that intentionally results in water that was previously



diverted at a specific time and place to be left instream. Transactions can include a water lease or purchase, a forbearance agreement, a formal water rights dedication, or other intentional acts to reduce a water diversion and leave water instream. Ownership of the right does not necessarily change.

Instream uses: The beneficial uses of water within a stream or river without diversion from the stream.

Junior right: Water rights that are established more recently than older or more senior rights. In times of shortage the most recent (“junior”) right holder must be the first to discontinue such use; each right’s priority dates to the time the permit application was filed with the State Water Board.

License: The license represents the final official step in the post-1914 appropriation process with the State Water Board that begins with an application, followed by a permit: “When the project is completed, the terms of the permit have been met and the largest volume of water under the permit is put to beneficial use, the Board confirms the terms and conditions and issues a license to the appropriator. This license is the final confirmation of the water right and remains effective as long as its conditions are fulfilled and beneficial use continues.”

Long-term: A water transfer with a duration of more than one year. (CWC § 1735)

Losing reach: A losing reach is one which is above the groundwater table, and water moves from the channel into the surrounding ground.

Monitoring: The repetition of measurements over time for the purpose of detecting change.

Baseline: Measurements made to characterize existing conditions and to establish a data base for planning or future comparisons. The intent is to capture much of the temporal variability of the constituent(s) of interest.

Compliance: Measurements made to determine whether specified criteria (e.g., water quality standards) are being met. The criteria can be numerical or descriptive, and may have the location, frequency, and method of measurement specified in associated regulations.

Effectiveness: Measurements used to evaluate whether the specified activities had the desired effect.

Implementation: An assessment of whether activities were carried out as planned, often carried out as an administrative review instead of by actual field measurements.

Project: Measurements taken to assess the impact of a particular activity or project. Often this assessment is done by comparing data taken upstream and downstream of the project site, or before and after.

Trend: Measurements made at regular, well-spaced time intervals in order to determine the long-term trend in a particular parameter.

Motion for Reconsideration: When the State Water Board orders a reconsideration of all or part of a decision or order on the board's own

motion or on the filing of a petition of any interested person or entity. (CWC § 1122)

No Injury Rule: Under the no injury rule, a change in the use of a water right, either by transfer or changing the purpose of use, would not be authorized if it reduced the availability of water for downstream users, regardless of the water priority of those users. Under the no injury rule, only “new water” is transferable, i.e., water that is added to the downstream water supply as a result of the transfer or water right change.

Nonconsumptive use: Water drawn for use that is not consumed and removed from the stream system. For example, seepage from ditch that returns flow to the stream is nonconsumptive.

Non-use: When an appropriative water right is not put to a beneficial use. All or part of a right acquired under the appropriation permit system may be lost by five years of non-use. Non-use is different from abandonment. Also called “forfeiture.” (CWC § 1241)

Order: A legal decision adopted by the State Water Board, or issued by staff through its delegated authority.

Over-appropriated: A water rights term used to describe a surface water drainage system that has more water rights claims on the system than can be satisfied by the physical supply of water available.

Paper water: The amount of water allocated to a water right as specified in a water right license, decree, or other paper document. This amount of water is only considered ‘real water’ when it is put to beneficial use. Paper water may be prevented from becoming ‘real water’ when there is not enough water to supply its full allocation, due to insufficient stream flow and/or senior water right holders in the stream system, or in circumstances where the right

has not been perfected because the necessary infrastructure to get water to the designated place of use is not in place or is not operational.

Partial Season: A water transaction for less than a full season of water use, often referring to a part of an irrigation season (e.g., late summer).

Permissive change: A water rights change under Section 1707 that adds instream use to the current uses without replacing them.

Permit: An official water rights document issued by the State Water Board as a step in the post-1914 appropriation process, following submittal of an application for a new water right. Water right permits carefully spell out the amounts, conditions, and construction timetables for the proposed water project. Before the Board issues a permit, it must take into account all prior rights and the availability of water in the basin. The Board considers, too, the flows needed to preserve instream uses such as recreation and fish and wildlife habitat.

Petition: The form used when petitioning the State Water Board for a change in a water right.

Priority: 1. The right of an earlier appropriator to divert from a natural stream in preference to a later appropriator. 2. Seniority date of a water right or conditional water right to determine their relative seniority to other water rights and conditional water rights deriving water from a common source. Priority is a function of both the appropriation date and the relevant adjudication date of the right.

Priority date: The date of establishment of a water right. The rights established by application have the application date as the date of priority.

Prior Appropriation Doctrine: Prior appropriation doctrine establishes appropriative water rights under the legal doctrine that the

first person to take a quantity of water from a water source for “beneficial use”—agricultural, industrial or household —has the right to continue to use that quantity of water for that purpose. Subsequent users can take the remaining water for their own beneficial use provided that they do not impinge on the rights of previous users.

Public Trust Doctrine: A legal doctrine recognizing public rights in the beds, banks, and waters of navigable waterways, and the State's power and duty to exercise continued supervision over them as trustee for the benefit of the people.”

Real water: In contrast to paper water, real water is a water right that has enough natural supply to meet the full water allocation.

Reasonable use: A state constitutional requirement (Article X, Section 2) that all water resources must be put to beneficial use, preventing waste or unreasonable use or unreasonable method of use.

Return flow: The amount of water that reaches a surface or ground water source after it has been released from the point of use and thus becomes available for further reuse; sometimes referred to as “tailwater.”

Riparian Doctrine: A legal concept in which owners of lands along the banks of a stream or body of water have the right to reasonable use of the water and a correlative right protecting against unreasonable use by others that substantially diminishes the quantity or quality of water. The right is appurtenant to the land and does not depend on prior use.

Riparian right: The legal right held by an owner of land contiguous to or bordering on a natural stream or lake, to take water from the source for use on the contiguous land.



Senior right: One of the older water rights on a stream; holding a senior priority date on the permit application filed with the State Water Board.

Short-term: In the context of a water right transfer, less than 1 year in duration.

Storage: Water diverted to storage and not bypassed to the stream downstream. Water diverted into a tank for domestic water supply is usually considered to be direct diversion.

Supplemental Decree: The court having the appropriate jurisdiction over the decreed rights in a water rights adjudication may enter a supplemental decree modifying any rights involved upon motion of the State Water Board or any party with a vested water right. (CWC § 1740)

Tailwater: The runoff of irrigation water from the lower end of an irrigated field. See also, “Return Flow.”

Temporary water transfer: A water transfer with a duration of one year or less. (CWC § 1728)

Transaction: See Instream Transaction.

Urgent need: The existence of circumstances from which the State Water Board may in its judgment conclude that the proposed temporary change is necessary to further the constitutional policy of reasonable use and avoidance of waste. Temporary Urgency Change Petitions are described in Water Code Section 1435.

It usually refers to a transfer lasting less than 180 days.

Water measurement data logger: An electronic device used to automatically record data, typically water elevation or stage, at set time intervals. Data storage can be analog or digital. Depending on the system, digital data can be transmitted wirelessly using cellphone-like signal relay, satellite relay, signal repeaters or wi-fi.

Water right: A legal entitlement authorizing water to be diverted from a specified source and put to a beneficial, non-wasteful use. (CWC § 79702(ab))

Water transfer: A temporary or long-term change in the point of diversion, place of use, or purpose of use resulting from a reallocation of water among water users.

Watermaster: A watermaster is a person often assigned to manage diversions and ensure that an adjudication (as defined in the court decree), or another water rights determination, is being followed. He/she may be employed by the state (DWR), a special watermaster district, or a private contractor, but reports to the Court or the State Water Board.

Sources

CWC – California Water Code section

DWR – California Water Plan Update 2013 Glossary

SWB – “Water Rights Process” & “Water Transfers Program” webpages

“Glossary of Water Terminology”, by R. Waskom and M. Neibauer, (5/12), Colorado State University Extension Service <http://extension.colostate.edu/topic-areas/agriculture/glossary-of-water-terminology-4-717/>

Abbreviations

A-F	Acre-feet. Also “ac-ft”.
Cal/EPA	California Environmental Protection Agency
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
cfs	cubic feet per second
CWC	California Water Code (relevant sections)
DFW	California Dept. of Fish and Wildlife (formerly Dept. of Fish & Game (DFG))
DWR	California Dept. of Water Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act (federal)
eWRIMS	Electronic Water Rights Information Management System
gpd	Gallons Per Day
ID	Identification number
NOAA	National Oceanic and Atmospheric Administration-Fisheries Division; also known as National Marine Fisheries Service (NMFS)
NOE	Notice of Exemption (under CEQA)

NRCS	Natural Resource Conservation Service
OCC	Office of Chief Counsel, SWB
POD	Point of Diversion
RCD	Resource Conservation District
SWB	State Water Board
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WCB	Wildlife Conservation Board (California)

Appendices

- ([available at www.calinstreamguide.org](http://www.calinstreamguide.org))
- » Appendix A. Forbearance Agreement Examples
 - » Appendix B. California Water Code Sections

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