



WRMP Data-Sharing Policy

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PREPARED FOR

San Francisco Estuary Wetlands Regional Monitoring Program

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EXECUTIVE SUMMARY

The WRMP Data-Sharing Policy (Policy) is a document designed to articulate the principles informing the exchange of data and information among partners of the WRMP and the public the program serves. This Policy re-affirms key values, approaches, and practices, while also sharing the practical constraints to be born in mind when sharing data as openly and freely as possible.

The Policy offers essential direction for data sharing, in alignment with the WRMP Program Plan. It also describes the responsibilities associated with the program staff, program partners / contributors, and the general public who must agree to the terms in the Policy prior to using the data.

Intended Audience:

- Program partners
- Program staff
- General public



Data-Sharing Policy

As a science program that serves and is accountable to the public at large, the San Francisco Estuary Wetlands Regional Monitoring Program (WRMP) aims to uphold high standards for **data transparency, openness, quality, and documentation**. Such standards epitomize the program, from its origin until the present moment. Readily available monitoring data being key to the program's success, the following Data-Sharing Policy (Policy) takes as its purpose the description of how such open-data concepts are put into regular practice across the range of programmatic data outputs.

Key Principles for Data Sharing

This document aims for consistency with prior foundational materials, particularly those regarding data management and the data lifecycle. Rather than altering them, this policy extends the relevance of these published materials while providing more details about their application to current program needs.

Accordingly, the latest version of the WRMP Plan (Plan)¹ describes key aspects of data management associated with the program. The following Data-Sharing Policy begins with the concepts detailed in that Plan, while further elaborating them, particularly with respect to the program's data-sharing objectives, processes, and obligations, now that the program has further matured and evolved. In particular, the Program Plan's "Chapter 3: Data Management" offers some guiding principles which we've endeavored to follow. Those principles include:

¹ WRMP. 2020. San Francisco Estuary Wetland Regional Monitoring Program Plan prepared by the WRMP Steering Committee. San Francisco Estuary Partnership, San Francisco, CA. https://www.wrmp.org/wp-content/uploads/2024/02/SFE_WRMP-Program-Plan_040121_Web_AD_A_MissionStatementUpdate_240205.pdf

- **Collaboration among institutions:** The WRMP will work across institutions and organizations to achieve program goals.

Effective **collaboration** is fundamental to a multipartner program such as the WRMP, but nowhere more so than in its data-sharing practices. Ensuring that data can be exchanged securely, under known and predictable terms prior to public release, is a goal that aligns with this principle.

- **Legitimacy through transparency:** The WRMP will function through a fair, deliberative and transparent process.

Data is an essential output of the WRMP, but **transparency** begins long before the generation of the datasets themselves. The program aims to promote transparency regarding all aspects of decision-making regarding the data lifecycle, from planning to release. Whenever possible, the program will favor open-source software, open-data initiatives, and openness with regard to meetings, forums, and decisions. Data attribution and documentation are instruments of transparency, which will be covered in this document.

Distribution that facilitates **discoverability** also serves the need for transparency. If discoverability is hindered – if the WRMP data are difficult to find, access, contextualize, or categorize – then transparency is diminished.

These principles align with and advance the directives found in the “Open and Transparent Water Data Act,” a California statute passed in 2016 that mandates key state agencies to “develop protocols for data sharing, documentation, quality control, public access, promotion of open-source platforms, and promotion of decision support tools related to water data.”²

- **Long-term ownership and sustainability:** We intend that the WRMP, once established, will be long lasting and sustainable.

When considering data sharing and the instruments used to convey the data, the program aims for **efficient and sustainable** practices that

² California Department of Water Resources. AB 1755: Open and Transparent Water Data Platform for California. Accessed July 20, 2025: <https://water.ca.gov/ab1755>

recognize the public trust. As such, the administrative team deliberates carefully about its adopted tools and methods to promote cost-effective decisions with minimal cost burdens as these are more sustainable over the long-term.

- **Adaptive management:** The WRMP is rooted in an adaptive management model. As new science emerges, the program can adapt [its methods and technology] through adjustment of management questions.

The partners that serve the WRMP commonly adhere to adaptive management practices, and data management is no exception. As the data lifecycle indicates, with planned revisions to data collection and analysis based on prior efforts and coordinated decision making, the program's data management efforts must evolve over time. Clearly, this leads to general process improvement and potential cost savings, but with respect to data, it will also result in **higher quality**, as measured by feedback from the Technical Advisory Committee and Steering Committee.

These principles are consistent with those circulated among prominent governmental agencies, including the [National Institutes of Health](#), [US National Science Foundation](#), and [US Environmental Protection Agency](#), and the [State of California](#).

Programmatic Responsibilities

The WRMP itself – administrative staff and governance structure – bears responsibilities to facilitate and incentivize data sharing in alignment with the above principles. The following responsibilities are incumbent upon program staff and associated resources.

Sharing data in a timely manner

The WRMP, upon collecting or receiving data, shall process and distribute the data in a timely manner, expediting data to be used in time-bound or urgent decisions. In alignment with the program's mission to promote more cost-effective wetland monitoring in support of permitting, the program shall recognize the need for distribution of information to hasten public decision making.

Making data public unless there is a clearly stipulated reason for constraining distribution

Whereas some projects assume by default that monitoring data will be withheld from public view, the WRMP shall assume that program data will be made freely available for public distribution unless indicated otherwise.

Some anticipated reasons for a more limited release might include:

- Data that captures personally private or sensitive information. This is also known as PII or “Personally Identifiable Information.” Social science data, which has not been otherwise anonymized, would be more likely to contain such sensitive information.
- Data that indicates the location of endangered or sensitive species. For species protection, this information must be either geographically generalized or completely withheld.
- Data owned by a private company, shared under special licensing constraints, used for a specific scientific purpose. The terms of the license would indicate the contractual limitations on distribution.

The program must be informed of such limitations on open distribution prior to data collection or purchase. Otherwise, the program will share data under the terms of Creative Commons (CC BY-NC-SA).³

Documenting methods for generating data

Commensurate with common quality control procedures, it is important to document the methods and/or methodologies for data collection and analysis. Typically captured in a Quality Assurance Program Plan, these procedures will be associated with the metadata (information about a given dataset) and linked to data distribution.

Leveraging common vehicles for data distribution

- WRMP.org website will be redesigned to promote discoverability of key datasets, analyses, and interpretations
- “Raw data” shared via the Geospatial Data Portal: data.wrmp.org

³ The Creative Commons License CC BY-NC-SA (Attribution-NonCommercial-ShareAlike) requires attribution, noncommercial use, with open sharing and unchangeability of the license terms by data consumers. <https://creativecommons.org/share-your-work/cclicenses/>

- Wetland location, categorization, condition, and project (restoration, conservation, and mitigation) information shared via EcoAtlas
- Derived analyses shared via tools, including ArcGIS Online, RShiny, and other visualization technologies, as referenced by the WRMP.org website.

All of these tools for distribution are subject to change over time as adaptive management re-evaluates their cost-effectiveness.

Partner Responsibilities

WRMP partners range broadly from public agencies to private consultants to non-profit organizations to academic researchers. All such partners will be required to observe a number of responsibilities which are often but not necessarily formalized in their contracts, as applicable. Such responsibilities are shared here for public reference:

Composing a Data Management Plan

As is a common practice, partners will be required to submit a data management plan (DMP) prior to the start of data collection. This brief document – typically two-to-three pages – will record:

- The types of samples, software, and other materials to be used or produced in the course of the monitoring project.
- The formatting standards to be used for data and metadata content, along with how the metadata will be adapted to the WRMP standard set of attributes.
- Any exceptions to the programmatic standards for data access and sharing, including details regarding the protection of privacy, confidentiality, and/or intellectual property requirements.
- Guidance or constraints on data interpretation, reuse, redistribution and the production of derivatives.
- Exceptions for data submission, with respect to alternative data repositories or retention policies.

This DMP will be revised over the course of the project to keep pace with any unanticipated changes to the project affecting data collection, analysis, or distribution.

Conforming to Metadata requirements

The WRMP's Geospatial Data Catalog is an open-source metadata repository, used commonly in public museums, academic libraries, and other institutions with a public mission. At its foundation is a metadata schema based on [Dublin Core](#), which is interoperable with the OpenGeoMetadata open-source systems, with additional metadata attributes customized by the WRMP. Those attributes are included in the Data Catalog Glossary: <https://data.wrmp.org/glossary>

While partners may include their own metadata in any submission, they must also complete the WRMP metadata that includes such program-specific information as:

- WRMP Primary Indicator
- WRMP Secondary Indicator(s)
- Subregion(s)
- Operational Landscape Unit(s)
- Topic(s)
- Availability Status

Documenting methods

In association with the DMP, the methods used for data collection, analysis, and interpretation must be documented thoroughly. This practice not only inspires confidence in the validity of the outputs, but it also promotes consistent observational methods over time as different practitioners undertake the same efforts.

Planning for public release of information, unless otherwise prohibited

The WRMP recognizes that partners might withhold research materials prior to the publication of a related journal article or research findings. However, this embargo on data sharing must be regarded as a time-bound, temporary provision, with the bias leaning towards open data sharing with few exceptions granted to those protecting private or sensitive information.⁴

⁴ If a partner collects information targeting or incidentally captures sensitive plant and/or animal species, this information must be added to the California Natural Diversity Database, which is currently housed under the California Department of Fish and Wildlife. Cf. <https://wildlife.ca.gov/Data/CNDDDB>

Unless prohibited by written exception, data should be released publicly within the month following the completion of the data collection project, inclusive of quality control and other data processing steps.

Public Responsibilities⁵

The following describe the responsibilities to be observed by the general public, those persons not otherwise included as WRMP staff, partners, or contributors.

Observing and sharing attribution

Unless otherwise specified in association with specific information distribution, all information, software, and data distributed via these program resources may be redistributed with proper attribution to the WRMP and with reference to the specific Website page by which the source information is originally posted or shared. Users must not reproduce, distribute, modify, create derivative works of, publicly display, publicly perform, republish, download, store, or transmit any of the material on our websites without attribution to the WRMP.

Honoring data-usage guidelines and other provisions indicated in the metadata

The information presented on or through the program websites is made available for public benefit and without any assurance or warranty of the accuracy, completeness, precision, timeliness, or usefulness of this information.

User's interpretation and use of the data might be limited to their own understanding of the data-usage guidelines furnished in connection with the respective dataset. Users are urged to consult these guidelines. However, any reliance users place on such information is strictly at their own risk. We disclaim all liability and responsibility arising from any reliance placed on such materials by active users or any other visitor to the WRMP Websites, or by anyone who may be informed of any of its contents. Prudent usage, knowledge of the data quality, and professional courtesy should all be considered in obtaining and using WRMP data.

⁵ The materials included here with respect to "public responsibilities" and the disclaimers that follow were produced, in large part, through legal consultation with the goal: to promote proper information usage and limitations on liability.

As our geospatial data does not reflect engineering surveys, they must neither be used as such nor used beyond the reasonable limits of the source scale.

Honoring licensing terms and legal restrictions

Users may use the WRMP Websites only for lawful purposes and in accordance with this Data-Sharing Policy. They agree not to use the WRMP Websites:

- In any way that violates any applicable federal, state, local, or international law or regulation (including, without limitation, any laws regarding the export of data or software to and from the US or other countries).
- For the purpose of exploiting, harming, or attempting to exploit or harm minors in any way by exposing them to inappropriate content, asking for personally identifiable information, or otherwise.
- To transmit, or procure the sending of, any advertising or promotional material without our prior written consent, including any "junk mail," "chain letter," "spam," or any other similar solicitation.
- To impersonate or attempt to impersonate the WRMP, a WRMP staff member, or any other person or entity (including, without limitation, by using email addresses associated with any of the foregoing).
- To engage in any other conduct that restricts or inhibits anyone's use or enjoyment of the websites, or which, as determined by us, may harm the WRMP or users of the websites, or expose them to liability.

Agreeing to this Data-Sharing Policy

By using the WRMP websites, users accept and agree to be bound and abide by this Data-Sharing Policy, found at <https://wrmp.org>, incorporated herein by reference. If they do not want to agree to this Data-Sharing Policy, which may change from time to time at our discretion, users must not access or use the WRMP websites.

Disclaimers

Disclaimer of Warranties

THE WRMP WEBSITES, THE CONTENT, AND ALL INFORMATION, PRODUCTS AND SERVICES MADE AVAILABLE THROUGH THE WEBSITES ARE PROVIDED

ON AN "AS IS," "AS AVAILABLE" BASIS, WITHOUT REPRESENTATIONS OR WARRANTIES OF ANY KIND. TO THE FULLEST EXTENT PERMITTED BY LAW, THE WRMP DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO THE SITES, THE CONTENT, THE TRADEMARKS AND ALL INFORMATION, PRODUCTS AND SERVICES MADE AVAILABLE THROUGH THE WEBSITE. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE WRMP AND OTHER WRMP PARTNERS DISCLAIM ALL REPRESENTATIONS AND WARRANTIES, EXPRESS, IMPLIED OR STATUTORY: (A) OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE; (B) ARISING FROM COURSE OF DEALING OR COURSE OF PERFORMANCE; (C) RELATING TO THE SECURITY OF THE SITES; OR (D) THAT THE SITES WILL OPERATE WITHOUT INTERRUPTION OR ERROR.

APPLICABLE LAW MAY NOT ALLOW THE LIMITATION OF CERTAIN WARRANTIES, SO ALL OR PART OF THIS DISCLAIMER OF WARRANTIES MAY NOT APPLY TO USERS.

Limitation on Liability

UNDER NO CIRCUMSTANCES, WILL THE WRMP, ITS STAFF, EMPLOYEES, PARTNERS, OFFICERS, AGENTS, OR LICENSORS BE LIABLE TO USERS OR ANY THIRD PARTY FOR ANY LOSSES OR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OF OR INABILITY TO USE THE SITES, ANY CONTENT, OR ANY INFORMATION, PRODUCTS OR SERVICES PROVIDED THROUGH THE WEBSITES.

THIS IS A COMPREHENSIVE LIMITATION OF LIABILITY THAT APPLIES TO ALL LOSSES AND DAMAGES OF ANY KIND (WHETHER DIRECT, INDIRECT, GENERAL, SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, LOSS OF INCOME OR PROFITS), WHETHER THE CLAIM IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR ANY OTHER LEGAL THEORY, EVEN IF AN AUTHORIZED REPRESENTATIVE OF THE WRMP HAS BEEN ADVISED OF OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES, AND WITHOUT REGARD TO THE EFFECTIVENESS OF OTHER REMEDIES.

IF ANY PART OF THIS LIMITATION OF LIABILITY IS FOUND TO BE INVALID OR UNENFORCEABLE FOR ANY REASON, THEN SUCH PART MAY BE SEVERED OR MODIFIED TO THE EXTENT NECESSARY TO MAKE THIS LIMITATION OF

LIABILITY VALID AND ENFORCEABLE AND, IF SUCH PART IS SO SEVERED OR MODIFIED, THE REMAINDER OF THIS LIMITATION OF LIABILITY SHALL CONTINUE UNABATED IN FULL FORCE AND EFFECT.

Indemnification

Users agree to defend, indemnify, and hold harmless the WRMP, its staff, partners, affiliates, licensors, and service providers, and its and their respective officers, directors, employees, contractors, agents, licensors, suppliers, successors, and assigns from and against any claims, liabilities, damages, judgments, awards, losses, costs, expenses, or fees (including reasonable attorneys' fees) arising out of or relating to their violation of this Data-Sharing Policy or their use of the WRMP Websites, including, but not limited to, any use of the WRMP Websites' content, data, and services other than as expressly authorized in this Data-Sharing Policy, or their use of any information obtained from the WRMP Websites.

Governing Law and Jurisdiction

All matters relating to the WRMP Websites and this Data-Sharing Policy, and any dispute or claim arising therefrom or related thereto (in each case, including non-contractual disputes or claims), shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to any choice or conflict of law provision or rule (whether of the State of California or any other jurisdiction).

Any legal suit, action, or proceeding arising out of, or related to, this Data-Sharing Policy or the WRMP Websites shall be instituted exclusively in the federal courts of the United States or the courts of the State of California, in each case located in the City of Richmond and County of Contra Costa. Users waive any and all objections to the exercise of jurisdiction over them by such courts and to venue in such courts.

Waiver and Severability

No waiver by the WRMP of any term or condition set out in this Data-Sharing Policy shall be deemed a further or continuing waiver of such term or condition or a waiver of any other term or condition, and any failure of the WRMP to assert a right or provision under this Data-Sharing Policy shall not constitute a waiver of such right or provision.

If any provision of this Data-Sharing Policy is held by a court or other tribunal of competent jurisdiction to be invalid, illegal, or unenforceable for any reason, such provision shall be eliminated or limited to the minimum extent such that the remaining provisions of the Data-Sharing Policy will continue in full force and effect.