

Attachment I - List of Technical References

- AG Innovations Network. 2013. Bodega Valley Rainwater Catchment & Alternative Water Supply Program. <https://oaec.org/publications/bodega-valley-rainwater-catchment-project/>
- Barlow, P.M., & Leake, S.A., 2012. Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow, U.S. Geological Survey Circular 1376, 84 p.
https://pubs.usgs.gov/circ/1376/pdf/circ1376_barlow_report_508.pdf
- Brunner, P., Cook, P. G., & Simmons, C. T. (2011). Disconnected surface water and groundwater: From theory to practice. *Ground Water*, 49(4), 460– 467. <https://doi.org/10.1111/j.1745-6584.2010.00752.x>
- California Department of Fish & Wildlife (CDFW), 2023. ArcGIS Shapefile of High Priority Coho Rearing Habitat Watersheds Obtained from David Hines, January 2023.
<https://sonomacounty.maps.arcgis.com/apps/webappviewer/index.html?id=8baedfd50be640b0b11548537f89fee2>
- California Department of Water Resources (DWR), 2018. Statewide Crop Mapping Dataset, <https://data.cnra.ca.gov/dataset/statewide-crop-mapping>.
- California Environmental Flows Framework Technical Team. 2018. The California Environmental Flows Framework Guidance Document. Retrieved from <http://ceff.ucdavis.edu>
- California Roundtable on Water and Food Supply. 2012. From Storage to Retention: Expanding California's Options for Meeting Its Water Needs. https://aginnovations.org/wp-content/uploads/2019/07/CRWFS_Storage_to_Retention.pdf
- California Roundtable on Water and Food Supply. 2014. From Crisis to Connectivity: Renewed Thinking About Managing California's Water and Food Supply.
https://aginnovations.org/wp-content/uploads/2019/07/CRWFS_Connectivity_Report.pdf
- California State Lands Commission. 2017. A Legal Guide to the Public's Rights to Access and Use California's Navigable Waters. <https://www.slc.ca.gov/wp-content/uploads/2018/11/2017-PublicAccessGuide.pdf>
- Chapman, Allan R., Ben Kerr, and David Wilford, 2018. A Water Allocation Decision-Support Model and Tool for Predictions in Ungauged Basins in Northeast British Columbia, Canada. *Journal of the American Water Resources Association (JAWRA)* 54(3): 676–693.
<https://doi.org/10.1111/1752-1688.12643>

- City of Santa Rosa and County of Sonoma 2011. Storm Water Low Impact Development Technical Design Manual.
<https://www.srcity.org/DocumentCenter/View/8942/Low-Impact-Development-Technical-Design-Manual-PDF>
- Dettinger, M. 2011. Climate change, atmospheric rivers and floods in California—A multimodel analysis of storm frequency and magnitude changes. Journal of the American Water Resources Association, 47, 514–523. <https://doi.org/10.1111/j.1752-1688.2011.00546.x>
- Farrar, C.D., Metzger, L.F., Nishikawa, T., Koczot, K.M., and Reichard, E.G., 2006. Geohydrological Characterization, Water Chemistry, and Ground-Water Flow Simulation Model of the Sonoma Valley Area, Sonoma County, California, U.S. Geological Survey Scientific Investigations Report 2006-5092.
<https://pubs.er.usgs.gov/publication/sir20065092>
- Freeze, R.A., and Cherry, J.A., 1979, Groundwater: Englewood Cliffs, NJ, Prentice-Hall, 604 p.
- Gleeson, T.; Richter, B. How much groundwater can we pump and protect environmental flows through time? Presumptive standards for conjunctive management of aquifers and rivers. River Res. Appl. 2018, 34, 83–92. <https://onlinelibrary.wiley.com/doi/10.1002/rra.3185>
- G. Mazzer Company, Russian River Coho Partnership, et al. 2019. Offstream Storage and Flow Restoration Project Upper Grape Creek, Russian River. <http://cohopartnership.org/wp-content/uploads/2019/01/Upper-Grape-Cr-Offstream-Storage-Project.pdf>
- Grantham TE, DM Carlisle, J Howard, B Lane, R Lusardi, A Obester, S Sandoval-Solis, B Stanford, ED Stein, KT Taniguchi-Quan, SM Yarnell, JKH Zimmerman. 2022. Modeling Functional Flows in California’s Rivers. Frontiers in Environmental Science. 10.
<https://www.frontiersin.org/article/10.3389/fenvs.2022.787473>
- Hanak, E., Lund, J., Dinar, A., Gray, B., Howitt, R., Mount, J., et. al. 2011. Managing California's water: From conflict to reconciliation. San Francisco, CA: Public Policy Institute of California.
http://books.google.com/books/about/Managing_California_s_Water.html?hl=&id=90hLp8aGrgIC
- Healy, R.W., 2010. Estimating Groundwater Recharge, Cambridge University Press, 245 p.
<https://www.cambridge.org/core/books/estimating-groundwater-recharge/F168E6618A5BAF50688FD09BB975979D>
- Horizon Systems. 2015. National hydrography dataset plus: Horizon Systems Corporation. Retrieved June 1, 2015, from <http://www.horizon-systems.com/nhdplus/>.

- Huggins, Xander & Gleeson, Tom & Eckstrand, Hailey & Kerr, Ben. (2018). Streamflow Depletion Modeling: Methods for an Adaptable and Conjunctive Water Management Decision Support Tool. JAWRA Journal of the American Water Resources Association. 54. 10.1111/1752-1688.12659. <https://onlinelibrary.wiley.com/doi/abs/10.1111/1752-1688.12659>
- Jenkins, C.T., 1968. Computation of Rate and Volume of Stream Depletion by Wells, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 4 Hydrologic Analysis and Interpretation, 21 p. https://pubs.usgs.gov/twri/twri4d1/pdf/twri_4-D1_a.pdf
- Kobor, J., & O'Connor, M., 2016. Integrated Surface and Groundwater Modeling and Flow Availability Analysis for Restoration Prioritization Planning, Green Valley\Atascadero and Dutch Bill Creek Watersheds, Sonoma County, California, 149 p. https://sonomarc.org/wpcontent/uploads/2020/12/MarkWestCreek_FlowAvailabilityAnalysis_FINAL_REPORT.pdf
- Kobor, J., & O'Connor, M., 2017. Sonoma County Groundwater Recharge Analysis, 32 p.
- Kobor, J., O'Connor, M., and Creed, W., 2020. Integrated Surface and Groundwater Modeling and Flow Availability Analysis for Restoration Prioritization Planning, Upper Mark West Creek Watershed, Sonoma County, California, 234 p. https://sonomarc.org/wpcontent/uploads/2020/12/MarkWestCreek_FlowAvailabilityAnalysis_FINAL_REPORT.pdf
- Kobor, J., O'Connor, M., and Creed, W., 2021. Integrated Surface and Groundwater Modeling and Flow Availability Analysis for Restoration Prioritization Planning, Mill Creek Watershed, Sonoma County, California, 198 p. <https://sonomarc.org/wp-content/uploads/2021/07/MillCreekFlowAvailabilityAnalysis.pdf>
- Leidy, R.A, Becker, G.S., Harvey, B.N., 2005. Historical Distribution and Current Status of Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) in streams of the San Francisco Estuary, California. Center for Ecosystem Management and Restoration, Oakland, CA, 28 p. <http://www.cemar.org/pdf/wholedoc2.pdf>
- Li, Q., Gleeson, T., Zipper, S.C. and Kerr, B. (2022), Too Many Streams and Not Enough Time or Money? Analytical Depletion Functions for Streamflow Depletion Estimates. Groundwater, 60: 145-155. <https://doi.org/10.1111/gwat.13124>
- National Marine Fisheries Service (NMFS), 2008. Russian River Biological Opinion. <https://www.sonomawater.org/biological-opinion>
- National Marine Fisheries Service (NMFS), 2012. Final Recovery Plan for Central California Coast Coho Salmon Evolutionarily Significant Unit, Southwest Region, Santa Rosa, California.

<https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-unit-central-california-coast-coho>

National Marine Fisheries Service (NMFS), 2014. Petaluma Watershed Steelhead Monitoring Report – 2013-2014 Spawning Surveys, 23 p. 22

https://www.researchgate.net/publication/290437842_Petaluma_Watershed_Steelhead_Monitoring_Report_2013-2014_Spawning_Surveys

National Marine Fisheries Service (NMFS), 2023. ArcGIS Shapefile of Critical Steelhead Habitat Streams for the North and Central California Coast.

<https://map.dfg.ca.gov/metadata/ds0122.html>

Nishikawa, Tracy, ed., 2013, Hydrologic and geochemical characterization of the Santa Rosa Plain watershed, Sonoma County, California: U.S. Geological Survey Scientific Investigations Report 2013–5118, 178 p. <https://pubs.usgs.gov/sir/2013/5118/>

Nossaman, S. et al. 2019. FLOW AND SURVIVAL STUDIES TO SUPPORT ENDANGERED COHO RECOVERY IN FLOW-IMPAIRED TRIBUTARIES OF THE RUSSIAN RIVER BASIN. Annual Report for Wildlife Conservation Board Grant WC-1663CR.

<https://repository.library.noaa.gov/view/noaa/38603>

Obedzinski, M., Nossaman Pierce, S., Horton, G.E. and Deitch, M.J. (2018), Effects of Flow-Related Variables on Oversummer Survival of Juvenile Coho Salmon in Intermittent Streams. *Trans Am Fish Soc*, 147: 588-605. <https://doi.org/10.1002/tafs.10057>

Rathfelder, K.M., 2016. Modeling Tools for Estimating Effects of Groundwater Pumping on Surface Waters. Province of B.C., Ministry of Environment, Water Science Series WSS2016-09, 120 p.

https://a100.gov.bc.ca/pub/acat/documents/r51878/tools4streamdepletion_1484093475_019_4092907088.pdf

Richter, B.D., Davis, M.M., Aspe, C., and Konrad, C., 2012. A Presumptive Standard for Environmental Flow Protection, *River Research and Applications* 28: 1312-1321.

<https://onlinelibrary.wiley.com/doi/10.1002/rra.1511>

Rohde M. M., T. Biswas, I. W. Housman, L. S. Campbell, K. R. Klausmeyer, and J. K. Howard, 2021: A Machine Learning Approach to Predict Groundwater Levels in California Reveals Ecosystems at Risk. *Frontiers in Earth Sciences*, 9.

<https://doi.org/10.3389/feart.2021.784499>.

SCI & LWA, 2022a. Santa Rosa Plain Groundwater Sustainability Agency Rate and Fee Study.

<https://santarosaplaingroundwater.org/finances/fee/>

SCI & LWA, 2022b. Sonoma Valley Groundwater Sustainability Agency Rate and Fee Study.

<https://sonomavalleygroundwater.org/fee/>

SCI & LWA, 2022c. Petaluma Valley Groundwater Sustainability Agency Rate and Fee Study.

<https://petalumavalleygroundwater.org/fee/>

Sonoma County Water Agency and Permit & Resource Management Department. 2010. County of Sonoma Agenda Item Summary Report California Statewide Groundwater Elevation Monitoring Program. [http://sonoma-](http://sonoma-county.granicus.com/MetaViewer.php?view_id=2&clip_id=130&meta_id=41989)

[county.granicus.com/MetaViewer.php?view_id=2&clip_id=130&meta_id=41989](http://sonoma-county.granicus.com/MetaViewer.php?view_id=2&clip_id=130&meta_id=41989)

Sonoma County Water Agency, 2016. Fish Habitat Flows and Water Rights Project, Draft Environmental Impact Report. State Clearinghouse No. 2010092087.

<https://www.sonomawater.org/fish-flow>

Sonoma Resource Conservation District and the Resource Conservation District of Santa Cruz County. 2015. Slow it. Spread it. Sink it. Store it! Guide to Beneficial Stormwater Management and Water Conservation Strategies Practical Ways to Protect Your Property and the Environment from the Effects of Stormwater Runoff. [https://sonomarc.org/wp-](https://sonomarc.org/wp-content/uploads/2017/06/Slow-it-Spread-it-Sink-it-Store-it.pdf)

[content/uploads/2017/06/Slow-it-Spread-it-Sink-it-Store-it.pdf](https://sonomarc.org/wp-content/uploads/2017/06/Slow-it-Spread-it-Sink-it-Store-it.pdf)

Sonoma Water, 2022. Groundwater Sustainability Plan, Sonoma Valley Groundwater Subbasin. Prepared for the Sonoma Valley Groundwater Sustainability Agency.

<https://sonomavalleygroundwater.org/gsp/>

Sonoma Water, 2022. Groundwater Sustainability Plan, Santa Rosa Plain Groundwater Subbasin. Prepared for the Santa Rosa Plain Groundwater Sustainability Agency.

<https://santarosaplaingroundwater.org/gsp/>

Sonoma Water, 2022. Groundwater Sustainability Plan, Petaluma Valley Groundwater Basin. Prepared for the Petaluma Valley Groundwater Sustainability Agency.

<https://petalumavalleygroundwater.org/gsp/>

Sonoma Water and California Sea Grant, 2022. Implementation of California Coastal Salmonid Monitoring in the Russian River Watershed (2019-2022).

https://www.sonomawater.org/media/PDF/Environment/monitoring/P1730412_RRCMP_FinalGrantReport_2022.pdf

State Water Resources Control Board Division of Water Rights. 1997. STAFF REPORT RUSSIAN RIVER WATERSHED. Proposed Actions to be taken by the Division of Water Rights on Pending Water Right Applications within the Russian River Watershed.

http://www.krisweb.com/biblio/russian_swrcb_dwr_1997_staffrptproposedactions.pdf

State Water Resources Control Board, 2015. RESOLUTION NO. 2015-0045 TO ADOPT A DROUGHT-RELATED EMERGENCY REGULATION REQUIRING ENHANCED WATER

CONSERVATION AND ADDITIONAL WATER USER INFORMATION FOR THE PROTECTION OF SPECIFIC FISHERIES IN TRIBUTARIES TO THE RUSSIAN RIVER.

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/rs2015_0045.pdf

Steiner Environmental Consulting, 1996. A History of the Salmonid Decline in the Russian River. https://www.waterboards.ca.gov/water_issues/programs/tmdl/records/region_1/2008/ref2809.pdf

Stetson Engineers, Inc., 2008. Delineation of Subterranean Streams and Potential Streamflow Depletion Areas. https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/subterranean_streams.html

Traum, J.A., Teague, N.F., Sweetkind, D.S., and Nishikawa, T., 2022, Hydrologic and geochemical characterization of the Petaluma River watershed, Sonoma County, California: U.S. Geological Survey Scientific Investigations Report 2022–5009, 217 p., <https://doi.org/10.3133/sir20225009>

United States Geological Survey, In Progress. Determining Water Availability in the Russian River Watershed. https://www.usgs.gov/centers/california-water-science-center/science/determining-water-availability-russian-river?qt-science_center_objects=0#qt-science_center_objects

Westenbroek, S.M., Kelson, V.A., Dripps, W.R., Hunt, R.J., and Bradbury, K.R., 2010. SWB – A Modified Thornthwaite-Mather Soil-Water-Balance Code for Estimating Groundwater Recharge, U.S. Geological Survey Techniques and Methods, 6-A31 60 p. <https://pubs.er.usgs.gov/publication/tm6A31>

Westminster Woods Camp & Conference Center, Russian River Coho Partnership, et al. 2019. Dutch Bill Creek Water Conservation & Storage Project Westminster Woods. <http://cohopartnership.org/wp-content/uploads/2019/01/Dutch-Bill-Cr-Westminster-Woods-Project.pdf>

Woolfenden, L.R., and Nishikawa, T., 2014. Simulation of Groundwater and Surface-Water Resources of the Santa Rosa Plain Watershed, Sonoma County, California, U.S. Geological Survey Scientific Investigations Report 2014-5052. <https://pubs.usgs.gov/sir/2014/5052/pdf/sir2014-5052.pdf>

Yarnell SM, Petts GE, Schmidt JC, Whipple AA, Beller EE, Dahm CN, Goodwin P, Viers JH. 2015. Functional Flows in Modified Riverscapes: Hydrographs, Habitats and Opportunities. *BioScience*. 65:10:963–972. <https://doi.org/10.1093/biosci/biv102>

Yarnell, SM, ED Stein, JA Webb, T Grantham, RA Lusardi, J Zimmerman, RA Peek, BA Lane, J Howard, S Sandoval-Solis. 2020. A functional flows approach to selecting ecologically relevant metrics for environmental flow applications. *Freshwater Biology* 36 318-324. <https://onlinelibrary.wiley.com/doi/10.1002/rra.3575>

Zimmerman JKH, Carlisle DM, May JT, et al. 2017. Patterns and magnitude of flow alteration in California, USA. *Freshwater Biology* 2018;63:859–873. <https://doi.org/10.1111/fwb.13058>

Cannabis and residential groundwater pumping impacts on streamflow and ecosystems in Northern California.

Zipper, S.C., Farmer, W.H., Brookfield, A., Ajami, H., Reeves, H.W., Wardropper, C., Hammond, J.C., Gleeson, T., and Deines, J.M. 2022. " Quantifying Streamflow Depletion from Groundwater Pumping: A Practical Review of Past and Emerging Approaches for Water Management." *Journal of the American Water Resources Association* 58(2): 289–312. <https://doi.org/10.1111/1752-1688.12998>.