



#### State Water Resources Control Board

# NOTICE OF OPPORTUNITY TO PROVIDE INPUT ON SCIENTIFIC, TECHNICAL, AND ECONOMIC INFORMATION FOR DEVELOPMENT OF ECONOMIC ANALYSIS AND SCIENTIFIC BASIS REPORT(S) FOR BASELINE MINIMUM FLOWS IN THE SCOTT RIVER AND SHASTA RIVER WATERSHEDS

The State Water Resources Control Board (State Water Board or Board) Division of Water Rights (Division) is compiling information to support the development of an economic analysis and scientific basis report(s) for baseline minimum flows in the Scott River and Shasta River watersheds. As background, on October 16, 2024, the State Water Board adopted Resolution No. 2024-0036, which, among other things, directed staff to develop a report setting forth the scientific basis for baseline minimum flow requirements and initiate analysis of implementing long-term baseline minimum flows. Lists of scientific, technical, and economic references and resources that the Board has compiled to support this effort are attached for review, with separate lists provided for each watershed (Attachment A – Scott River watershed; Attachment B – Shasta River watershed).

The public is invited to review the lists and provide feedback, including identifying any omissions, additional resources, or other scientific, technical, and economic information for the Board's consideration.

#### **HOW TO PROVIDE INPUT**

The deadline to submit input on additional information that the Board should consider as staff develop scientific basis report(s) and economic analyses for baseline minimum instream flows in the Scott River and Shasta River watersheds is **Friday**, **April 25**, **2025**.

### Email (preferred) to:

(with subject of Information for Scott-Shasta Flows, up to 150 MB)
ScottShastaFlows@waterboards.ca.gov

For files larger than 150 MB, please upload to our FTP site (https://ftp.waterboards.ca.gov):

Username: SSLTF-FTP Password: scottshasta

or

#### Hard copy to:

State Water Resources Control Board, Division of Water Rights P.O. Box 2000, Sacramento, CA 95812 (mail) 1001 I Street, 14<sup>th</sup> Floor, Sacramento, CA 95814 (hand-delivery)

E. JOAQUIN ESQUIVEL, CHAIR | ERIC OPPENHEIMER, EXECUTIVE DIRECTOR

#### BACKGROUND

California is experiencing increasingly extreme hydrologic conditions, including severe droughts, declining snowpack, and reduced water availability, that are consistent with climate change projections. Hydrologic conditions in the Scott River and Shasta River watersheds reflect these broader trends. Data from the past 20 years demonstrates that, prior to the implementation of emergency regulations, summer flows consistently met or exceeded drought emergency minimum flow thresholds in only four years in the Scott River and only two years in the Shasta River.

Recognizing the ongoing declining flow trends and continued impacts on fisheries in these watersheds, baseline minimum instream flows are needed to ensure protection of these fisheries in all water years, regardless of whether drought emergency regulation authority is in effect. To address this, on October 16, 2024, the State Water Board adopted Resolution No. 2024-0036, directing staff to develop the scientific basis for establishing long-term baseline minimum instream flow requirements in the Scott River and Shasta River watersheds and initiate analysis of the economic impacts of implementing long-term baseline minimum flows, including consideration of impacts on fishing and agriculture and associated indirect impacts.

#### **ADDITIONAL INFORMATION & HOW TO RECEIVE UPDATES**

If you would like to receive email updates please <u>sign up</u><sup>1</sup> under "State Water Resources Control Board" and "Water Rights" for the "Scott-Shasta Flows" email subscription list.

#### **QUESTIONS**

Please email questions regarding this notice and related efforts to: <a href="ScottShastaFlows@waterboards.ca.gov">ScottShastaFlows@waterboards.ca.gov</a> or leave a message at our dedicated Scott River and Shasta River phone line at: (916) 327-3113.

#### **ATTACHMENTS**

Attachment A: Scott River Watershed – List of Scientific, Technical, and Economic

Information Related to Development of Economic Analysis and Scientific Basis Report(s) for Baseline Minimum Flows in the Scott

River and Shasta River Watersheds

Attachment B: Shasta River Watershed – List of Scientific, Technical, and

Economic Information Related to Development of Economic

Analysis and Scientific Basis Report(s) for Baseline Minimum Flows

in the Scott River and Shasta River Watersheds

\_

<sup>&</sup>lt;sup>1</sup> URL: https://www.waterboards.ca.gov/resources/email\_subscriptions/

Attachment A: Scott River Watershed – List of Scientific, Technical, and Economic Information Related to Development of Economic Analysis and Scientific Basis Report(s) for Baseline Minimum Flows in the Scott River and Shasta River Watersheds

Below are scientific, technical, and economic references and resources that the Board has compiled to support the development of an economic analysis and scientific basis report(s) for the Scott River. The references are generally broken out into two sections: (I.) Scientific Basis Report(s) – related; and (II.) Economic Analysis – related. Please note that reports containing both economic and scientific information may appear only in one list, but that the Board has the reports available for consideration in either context. Please also note that information related to both the Scott River and Shasta River watersheds is duplicated in both attachments. Additionally, this list is intended to be broad, and the Board may not ultimately end up relying on all of the sources below. Refer to Attachment B for references and resources identified for the Shasta River watershed.

# I. Information Related to Scientific Basis Report(s)

- Asarian, J. E., & Kann, J. (2013). Synthesis of continuous water quality data for the Lower and Middle Klamath River, 2001–2011. Prepared for the Klamath Basin Tribal Water Quality Work Group.
- Asarian, J. E., & Walker, J. D. (2016). Long-term trends in streamflow and precipitation in Northwest California and Southwest Oregon, 1953–2012. Journal of the American Water Resources Association, 1–21.
- Asarian, J. E. (2017). GIS stream temperature modeling of Yurok Ancestral Territory. Prepared for the Yurok Tribe.
- Asarian, E. (2019). *Analysis of flow-water quality relationships at Scott River Gage. Riverbend Sciences.* Prepared for the Klamath Tribal Water Quality Consortium.
- Asarian, J. E., Cressey, L., Bennett, B., Grunbaum, J., Cyr, L., Soto, T., & Robinson, C. (2020). *Influence of snowpack, streamflow, air temperature, and wildfire smoke on Klamath Basin stream temperatures, 1995–2017.* Prepared for the Klamath Tribal Water Quality Consortium.
- Asarian, E., & Robinson, C. (2020). Relationships between water temperature, air temperature, and river flows in the Scott River near Fort Jones, California. Prepared for the Klamath Tribal Water Quality Consortium.
- Asarian, J. E. (2023). Evaluating the hydrologic effects of the 2021–2022 Scott and Shasta irrigation curtailments using remote sensing and streamflow gages.

  Prepared for the Klamath Tribal Water Quality Consortium.

- Asarian, J. E., Kann, J., & Perkins, K. (2023). *Temperature dynamics and trends in Upper Klamath Basin tributaries: Assessment of The Klamath Tribes long-term thermograph monitoring program.*
- Bales, R., & York, R. (2014). Scott River (Sugar Creek) water yield enhancement study: Phase I report. Report to the Scott River Watershed Cooperative Planning Group.
- Belchik, M. (2023). Status of the Klamath River Fishery. Prepared for the Yurok Tribe.
- Brown, L. R., & Moyle, P. B. (1991). Status of coho salmon in California: Report to the National Marine Fisheries Service. University of California, Davis.
- Buck, C. R. (2013). *Managing groundwater for environmental stream temperature* (Doctoral Dissertation). University of California, Davis.
- California Data Exchange Center. (2025). Scott River and tributary gages: Scott River Near Fort Jones (SFJ), Sugar Creek Below Darbee Ditch Near Callahan (SDA), Sugar Creek Near Callahan (SGN), French Creek at Hwy 3 Near Callahan (FCC), and Shackleford Creek Near Mugginsville (SCK). California Department of Water Resources. Website.
- California Department of Fish and Game. (1931). Salmon of the Klamath River, California (Fish Bulletin No. 34).
- California Department of Fish and Game. (1966). *California fish and wildlife plan:* Volume 1.
- California Department of Fish and Game. (1974). Report to the California State Water Resources Control Board summarizing the position of the Department of Fish and Game on the water rights adjudication of the Scott River Drainage.
- California Department of Fish and Game. (1974). Streamflow needs for anadromous salmonids in the Scott River Basin, Siskiyou County.
- California Department of Fish and Game. (1993). *Initial study and mitigated negative declaration for Scott River streambank stabilization project.*
- California Department of Fish and Game. (2000). Annual report: Shasta and Scott River juvenile steelhead trapping, 2000.
- California Department of Fish and Game. (2000–2012). Shasta and Scott River juvenile salmonid outmigrant studies and monitoring reports: 2000-2012.
- California Department of Fish and Game. (2002). Status review of California coho salmon North of San Francisco. Prepared for the California Fish and Game Commission.

- California Department of Fish and Game. (2003). Recommendations relating to agriculture and agricultural water use.
- California Department of Fish and Game. (2004). *Recovery strategy for California coho salmon*. Prepared for the California Fish and Game Commission.
- California Department of Fish and Game. (2006). Juvenile steelhead population monitoring in the French Creek Watershed, 1992–2005.
- California Department of Fish and Game. (2010). *Instream Flow Program: Annual Report*, 2009.
- California Department of Fish and Game. (2011). California coastal salmonid population monitoring: Strategy, design, and methods (Fish Bulletin 180).
- California Department of Fish and Game. (2011). Historical occurrence of coho salmon in the upper Klamath, Shasta, and Scott Rivers.
- California Department of Fish and Game. (2011). Summary of water diversion impacts.
- California Department of Fish and Game. (2012). Spring-run highlights: Coho salmon habitat conditions and management considerations. California Fish and Game, 98(1), 19–29.
- California Department of Fish and Game. (2013). Standard operating procedure for critical riffle analysis for fish passage in California.
- California Department of Fish and Wildlife. (2013–2020). Shasta and Scott River juvenile salmonid outmigrant studies and monitoring reports.
- California Department of Fish and Wildlife. (2015). Recovery strategy for California coho salmon: Progress report 2004–2012. Prepared for the California Fish and Game Commission.
- California Department of Fish and Wildlife. (2015). Sugar Creek beaver pond juvenile Coho salmon monitoring study, 2011-2012.
- California Department of Fish and Wildlife. (2016). Scott River Brood Year 2013

  Juvenile Coho Salmon PIT Tagging Study.
- California Department of Fish and Wildlife. (2016–2022). Scott River salmon studies final reports (2015–2022).
- California Department of Fish and Wildlife. (2016). Three-year report 2013–2015: Shasta and Scott River juvenile salmonid outmigrant study.
- California Department of Fish and Wildlife. (2017). *Interim instream flow criteria for the protection of fishery resources in the Scott River watershed.*

- California Department of Fish and Wildlife. (2021). Letter to the State Water Resources

  Control Board regarding Scott River best available scientific information for
  instream flow criteria and potential next steps (May 3, 2021).
- California Department of Fish and Wildlife. (2021). Letter to the State Water Resources Control Board regarding minimum flow recommendations for the Shasta and Scott Rivers (June 15, 2021).
- California Department of Fish and Wildlife. (2021). *Memorandum: Influence of Scott River in-stream flow on the distribution and migration timing of fall Chinook salmon and coho salmon.*
- California Department of Fish and Wildlife. (2021–2023). Scott River juvenile salmonid outmigrant study final reports (2021–2023).
- California Department of Fish and Wildlife. (2022). Letter to the State Water Resources Control Board regarding the re-adoption of drought emergency regulation on the Shasta and Scott Rivers with modified and additional recommendations (April 20, 2022).
- California Department of Fish and Wildlife. (2022). Letter to the State Water Resources Control Board regarding adjustment under Section 875(c)(1)(B) of the Drought Emergency Regulation to ramp down minimum June flow on the Scott River (June 3, 2022).
- California Department of Fish and Wildlife. (2022). Scott and Shasta River juvenile salmonid outmigration monitoring: In-season updates (January 28–June 17, 2022).
- California Department of Fish and Wildlife. (2023). *Influence of flow and temperature on Scott River salmonids as observed through snorkel surveys, 2022.*
- California Department of Fish and Wildlife. (2023). Letter to the State Water Resources Control Board in response to the Notice of Opportunity to Comment and of Public Hearing on a Petition for Rulemaking to Set Minimum Flows on the Scott River (July 20, 2023).
- California Department of Fish and Wildlife. (2023). Shasta and Scott River juvenile salmonid outmigration monitoring: In-season updates (March 21 & April 5, 2023).
- California Department of Fish and Wildlife. (2023–2025). Scott River connectivity survey reports.
- California Department of Fish and Wildlife. (2023). *Upper Klamath-Trinity rivers fall-run Chinook salmon (Oncorhynchus tshawytscha) status review.*
- California Department of Fish and Wildlife. (2024). Klamath River Basin Fall Chinook Salmon Spawner Escapement, In-river Harvest and Run-size Estimates, 1978-2023.

- California Department of Fish and Wildlife. (2024). Letter to the State Water Resources Control Board regarding the re-adoption of drought emergency regulation on the Shasta and Scott Rivers (November 20, 2024).
- California Department of Fish and Wildlife. (2024). Shasta and Scott River Juvenile Salmonid Outmigration Monitoring: In-Season Update JW23.
- California Department of Fish and Wildlife, NOAA-Fisheries, Scott River Water Trust, Siskiyou Resource Conservation District, & U.S. Forest Service. (2015). Cooperative report of the Scott River Coho salmon rescue and relocation effort: 2014 drought emergency.
- California Department of Public Works. (1945). Shackleford Creek Adjudication: Report on water supply and use. Division of Water Resources.
- California Department of Public Works. (1956). Supplemental report on water supply and use of water on French Creek stream system. Division of Water Resources.
- California Department of Water Resources. (1958). Order creating French Creek Watermaster Service Area, Siskiyou County, California.
- California Department of Water Resources. (1960). Bulletin 83: Klamath River Basin Investigation.
- California Department of Water Resources. (1965). Bulletin No. 94-5: Land and water use in Shasta-Scott Valleys hydrographic unit.
- California Department of Water Resources. (1976). *Eel-Russian Rivers streamflow augmentation studies: Scott Dam-Lake Pillsbury (Bulletin No. 105-5).*
- California Department of Water Resources. (1980). Order creating Wildcat Creek and Cold Creek Watermaster Service Area, Siskiyou County, California.
- California Department of Water Resources. (1991). Scott River flow augmentation study.
- California Department of Water Resources. (2024). Land use surveys.
- California Environmental Flows Working Group. (2021). *California Natural Flows Database: Functional flow metrics* v1.2.1. https://rivers.codefornature.org/
- California Ocean Protection Council. (2008). *In-stream flow assessments: Staff recommendation.*
- California State Lands Commission. (1999). Navigation on the Scott River: Correspondence and legal considerations.
- Carlson, S. R., Coggins, L. G., & Swanton, C. O. (1998). *A simple stratified design for mark-recapture estimation of salmon smolt abundance.* Alaska Fishery Research Bulletin, 5(2), 88–102.

- Carlson, M. C., & Satterthwaite, W. H. (2011). Weakened portfolio effect in a collapsed salmon population complex. Canadian Journal of Fisheries and Aquatic Sciences, 68(9), 1579–1589.
- Charnley, S. (2018). Beavers, landowners, and watershed restoration: Experimenting with beaver dam analogues in the Scott River Basin, California.
- Cordalis, A. (2021). Testimony of Amy Cordalis on behalf of the Yurok Tribe before the U.S. House Subcommittee on Water, Oceans, and Wildlife on drought impacts in the Klamath Basin (May 25, 2021). United States House of Representatives.
- David, A. T., Asarian, J. E., & Lake, F. K. (2018). *Wildfire smoke cools summer river and stream water temperatures.* Water Resources Research, 54.
- Davids, J. C. (2011). Spatial and temporal analysis of stream restoration efforts in depleted aquifer systems (Master's Thesis). California State University, Chico.
- Davy, P., & Méheust, Y. (2010). Scaling laws of discrete-fracture-network models: Flow and transport in fractured media.
- Drake, D. J., Tate, K. W., & Carlson, H. (2000). *Analysis shows climate-caused decreases in Scott River fall flows*. California Agriculture, 54(6), 46–49.
- Environmental Science Associates. (2009). Scott River Watershed-Wide Permitting Program: Final Environmental Impact Report. Prepared for the California Department of Fish and Game.
- Foglia, L., J. Neumann, D. G. Tolley, S. B. Orloff, R. L. Snyder, & T. Harter. (2013). Scott Valley Integrated Hydrologic Model: Data collection, analysis, and water budget: Final report. Prepared for the North Coast Regional Water Quality Control Board.
- Foglia, L., McNally, A., & Harter, T. (2013). Coupling a spatiotemporally distributed soil water budget with stream-depletion functions to inform stakeholder-driven management of groundwater-dependent ecosystems. Water Resources Research, 49(12), 7292–7310.
- Foglia, L., J. Neumann, D.G. Tolley, S.B. Orloff, R.L. Snyder, and T. Harter. (2018). Modeling guides groundwater management in a basin with river–aquifer interactions. University of California, Davis.
- Fujiwara, M. (2008). *Identifying interactions among salmon populations from observed dynamics*. Ecology, 89(1), 4–11.
- Genzoli, L., Robinson, C., & Asarian, J. E. (2015). *Patterns of fecal indicator bacteria in the Scott River Watershed, 2007–2014.* Prepared for the Quartz Valley Indian Reservation, Fort Jones, CA.

- Gilmore, C., Yokel, E., & Stapleton, B. (2018). Restoring priority Coho habitat in the Scott River Watershed: Modeling and planning report: Phase 1. Prepared by Scott River Watershed Council for the National Fish and Wildlife Foundation.
- Han, J. J. (2011). Spatial dynamic groundwater regulation to ensure adequate instream flows for salmon (Master's Thesis). University of Illinois.
- Hardy, T. B., Addley, R. C., & Saraeva, E. (2006). Evaluation of instream flow needs in the lower Klamath River: Phase II final report (Revised October 16, 2006). Utah State University. Prepared for the U.S. Department of the Interior.
- Hardy, T. B., & Shaw, T. A. (2015). An evaluation of the anadromous fish interim instream flow needs for the Lower Scott River, in Siskiyou County, California: Final report. Prepared for the Yurok Tribe.
- Harter, T., & Hines, R. (2008). *Scott Valley Groundwater Study Plan.* Prepared for the North Coast Regional Water Quality Control Board, Siskiyou County Resource Conservation District, and Siskiyou County Board of Supervisors.
- Hatfield, T., & Bruce, J. (2000). *Predicting salmonid habitat–flow relationships for streams from western North America*. North American Journal of Fisheries Management, 20(4), 1005–1015.
- Hébert, A. (2016). *Impacts to anadromous fish through groundwater extraction (Master's Project)*. University of San Francisco.
- Institute for Natural Systems Engineering, Utah Water Research Laboratory. (1999). Evaluation of interim instream flow needs in the Klamath River: Phase I final report. Prepared for the U.S. Department of the Interior.
- Karuk Tribe & Environmental Law Foundation. (2021). *Petition for emergency rulemaking to set minimum flows on the Scott River.* Submitted to the State Water Resources Control Board.
- Karuk Tribe, Environmental Law Foundation, Pacific Coast Federation of Fishermen's Associations, & Institute for Fisheries Resources. (2023). *Petition for rulemaking to set minimum flows on the Scott River.* Submitted to the State Water Resources Control Board.
- Kennedy, J. A., Shilling, F. M., & Viers, J. H. (2005). *Current and potential riparian forest condition along Scott River watershed tributaries*. University of California, Davis. Prepared for the North Coast Regional Water Quality Control Board.
- Kibel, P. S., & Gantenbein, J. (2018). *Drafting SGMA groundwater plans with fisheries in mind: A guidebook for using California's Sustainable Groundwater Management Act to protect fisheries.* Center on Urban Environmental Law, Golden Gate University School of Law.

- Lestelle, L. (2021). Assessment of Scott River salmon performance: Historical, current, and restoration scenarios. Prepared for the Karuk Tribe.
- Lusardi, R. A., Jeffres, C. A., & Moyle, P. B. (2018). Stream macrophytes increase invertebrate production and fish habitat utilization in a California stream. River Research and Applications, 34(8), 967–977.
- Manga, M. (1999). On the timescales characterizing groundwater discharge at springs. Journal of Hydrology, 219(1–2), 56–69.
- Manga, M. (2001). *Using springs to study groundwater flow and active geologic processes*. Annual Review of Earth and Planetary Sciences, 29(1), 201–228.
- Mid-Klamath Watershed Council. (2017). 2016 Winter Coho Spawning Survey.

  Prepared in collaboration with California Department of Fish and Wildlife, Karuk
  Tribal Fisheries Program, Klamath National Forest, and U.S. Fish and Wildlife
  Service.
- Moyle, P. B., Quiñones, R. M., Katz, J. V., & Weaver, J. (2015). Fish species of special concern in California.
- National Drought Mitigation Center. (2025). U.S. Drought Monitor. Website.
- National Marine Fisheries Service. (1997). Endangered and threatened species:

  Threatened status for Southern Oregon/Northern California Coast Evolutionarily
  Significant Unit (ESU) of coho salmon. Federal Register, 62(87), 24588–24597.
- National Marine Fisheries Service. (2001). Endangered and threatened species: Final listing determination for Klamath Mountains Province steelhead. Federal Register, 66(65), 17845–17854.
- National Marine Fisheries Service. (2007). *Magnuson-Stevens Reauthorization Act Klamath River Coho Salmon Recovery Plan.*
- National Marine Fisheries Service. (2014). Final recovery plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of coho salmon (Oncorhynchus kisutch).
- National Marine Fisheries Service. (2016). 5-year review: Summary & evaluation of Southern Oregon/Northern California Coast coho salmon.
- National Marine Fisheries Service. (2017). NOAA's Klamath River Basin recovery and restoration progress.
- National Marine Fisheries Service. (2018). Rapid regional assessment of decreased streamflow and fish bioenergetics responses: A case study from the Klamath Basin, California.

- National Marine Fisheries Service. (2023). Letter regarding the notice of opportunity to comment on a petition for rulemaking to set minimum flows on the Scott River (July 13, 2023). Submitted to the State Water Resources Control Board.
- National Marine Fisheries Service. (2023). Letter regarding the preliminary draft emergency regulation in the Scott River & Shasta River watersheds (November 14, 2023). Submitted to the State Water Resources Control Board.
- National Marine Fisheries Service & California Department of Fish and Wildlife. (2014). Scott River Drought Initiative Individual Agreement.
- National Research Council. (2004). Endangered and threatened fishes in the Klamath River Basin: Causes of decline and strategies for recovery.
- National Weather Service. (2024). Climate Prediction Center Seasonal Outlook. Website.
- Neuman, S. P. (2004). *Stochastic groundwater models in practice*. Stochastic Environmental Research and Risk Assessment, 18(4), 268–270.
- Nielsen, J. L., Lisle, T. E., & Ozaki, V. (1994). *Thermally stratified pools and their use by steelhead in northern California streams*. Transactions of the American Fisheries Society, 123(4), 613–626.
- Normandeau Associates, Inc. (2013). *Scott River and Shasta River study reaches*. Submitted to the California Department of Fish and Wildlife.
- North Coast Regional Water Quality Control Board. (2005). Staff report for the action plan for the Scott River Watershed: Sediment and temperature total maximum daily loads.
- North Coast Regional Water Quality Control Board. (2005). The effects of temperature on steelhead trout, coho salmon, and Chinook salmon biology and function by life stage: Implications for Klamath Basin TMDLs.
- North Coast Regional Water Quality Control Board. (2006). Action plan for the Scott River sediment and temperature total maximum daily loads.
- North Coast Regional Water Quality Control Board. (2011). Scott River Watershed Water Quality Compliance and Trend Monitoring Plan.
- North Coast Regional Water Quality Control Board. (2023). Letter to the State Water Resources Control Board regarding the petition for rulemaking to set minimum flows on the Scott River (July 19, 2023).
- Nylen, N. G., Owen, D., Harder, J., Kiparsky, M., & Hanemann, M. (2023). *Managing water scarcity: A framework for fair and effective water right curtailment in California*. University of California, Berkeley.
- Orloff, S. (n.d.). Do four cuttings of alfalfa use more water than three?

- Orloff, S. (1995). Assessment of fall agriculture irrigation water conservation potential in the Scott Valley. University of California Cooperative Extension.
- Orloff, S., Putnam, D., Hanson, B., & Carlson, H. (2003). *Controlled deficit irrigation of alfalfa: Opportunities and pitfalls.* University of California Cooperative Extension.
- Orloff, S., Bali, K., & Putnam, D. (2014). *Deficit irrigation of alfalfa and grasses: What are the impacts/options?* University of California Cooperative Extension.
- Pacific Coast Federation of Fishermen's Associations & Institute for Fisheries Resources. (2016). PCFFA and IFR scoping comments on application for water quality certification for the relicensing of Klamath Hydroelectric Project (FERC No. 2082). Submitted to the State Water Resources Control Board.
- Papadopulos and Associates. (2012). *Groundwater conditions in Scott Valley.* Prepared for the Karuk Tribe.
- Papadopulos and Associates. (2012). *Memorandum on stream depletion from groundwater pumping in Scott Valley.* Prepared for the Karuk Tribe.
- Parry, A. (2013). Evaluation and modernization of the Scott Valley Irrigation District (Senior Project). California Polytechnic State University.
- Patterson, D. W. (1976). Evaluation of habitats resulting from streambank protection projects in Siskiyou and Mendocino Counties, California. Soil Conservation Service.
- Persad, G. G., Swain, D. L., Katz, C., & Ortiz Partida, J. P. (2020). *Inter-model agreement on projected shifts in California hydroclimate characteristics critical to water management*. Climatic Change, 162, 1493–1513.
- Podlech, M. (2022). Memorandum: Review of CDFW recommendations for the 2022 readoption of drought emergency regulations on the Scott River and recommendations for alternative instream flow management during extreme drought conditions (August 31, 2022). Prepared for the Siskiyou County Farm Bureau.Poff, N. L., Allan, J. D., Bain, M. B., Karr, J. R., Prestegaard, K. L., Richter, B. D., Sparks, R. E., & Stromberg, J. C. (1997). The natural flow regime: A paradigm for river conservation and restoration. BioScience, 47(11), 769–784.
- PRISM Climate Group. (2024). *PRISM climate data and analysis*. Oregon State University, Northwest Alliance for Computational Science & Engineering. Website.
- Quartz Valley Indian Reservation. (2011). *Water quality monitoring and assessment report 2011: Scott River watershed.* Quartz Valley Indian Reservation Environmental Department.

- Quartz Valley Indian Reservation. (2016). Quality Assurance Project Plan: Water quality sampling and analysis. Quartz Valley Indian Reservation Environmental Department.
- Quiñones, R. M., Holyoak, M., Johnson, M. L., & Moyle, P. B. (2014). Potential factors affecting salmonid survival differ by run timing and location: Linear mixed-effects models of Pacific salmonids (Oncorhynchus spp.) in the Klamath River, California.
- R2 Resource Consultants, Inc., & Stetson Engineers, Inc. (2008). North Coast Instream Flow Policy: Scientific basis and development of alternatives—Protecting anadromous salmonids. Prepared for the California State Water Resources Control Board, Division of Water Rights.
- Rhoades, S. J., Caldwell, T. J., McBain, S., Henery, R., Stauffer-Olsen, N., McKinnon, T., Rossi, G. J., & Chandra, S. (2024). *Trout bioenergetics as a process-based tool to estimate ecological risk in a regulated river.* Journal of the American Water Resources Association, 60(2), 287–304.
- Rhoades, S. J., Caldwell, T. J., Stauffer-Olsen, N., McKinnon, T., McBain, S., Henery, R., & Chandra, S. (2024). *Reduced streamflow from water diversion alters stream ecology and fish behavior.* River Research and Applications, 2024(0), 1–16.
- Saar, M. O. (1998). Theoretical and numerical models of fluid flow within hydrothermal systems and their application to heat flow and hydrogeologic studies (Master's Thesis). University of Oregon.
- Schindler, D. E., Scheuerell, M. D., Moore, J. W., Gende, S. M., Francis, T. B., & Palen, W. J. (2003). *Pacific salmon and the ecology of coastal ecosystems.* Frontiers in Ecology and the Environment, 1(1), 31–37.
- Scott River Watershed Council. (2005). *Scott River Watershed Strategic Action Plan.*Prepared in cooperation with the Siskiyou Resource Conservation District.
- Scott River Watershed Council. (2021). French Creek instream and off-channel enhancement project: Final report. Prepared for the California Department of Fish and Wildlife, Fisheries Restoration Grant Program.
- Scott River Watershed Council. (2024). SRWC Fish Relocation Effort Summer 2024 in the Scott River Watershed.
- Scott River Watershed Council. (2025). Scott River Coho Salmon spawning ground survey: 2024-2025 season.
- Scott River Watershed Council & Quartz Valley Indian Reservation. (2023). Scott River Fisheries Monitoring Project: Direct observation for juvenile salmonids, Summer 2023.

- Scott River Watershed Council, Quartz Valley Indian Reservation, & Siskiyou Resource Conservation District. (2024). Scott River Fisheries Monitoring Report: Direct observation survey summary report, 2024.
- Scott River Watershed Council & Siskiyou Resource Conservation District. (2014). Scott River Watershed Restoration Strategy and Schedule.
- Scott Valley and Shasta Valley Watermaster District. (2013). Summary of Watermaster services for the 2012 season.
- Siskiyou County. (1996). Comprehensive Land and Resource Management Plan. Siskiyou County, California.
- Siskiyou County. (2022). Scott Valley groundwater sustainability plan under the Sustainable Groundwater Management Act. Prepared for the California Department of Water Resources.
- Siskiyou County Resource Conservation District. (1995). Stockwater for Chinook Scott Valley irrigation ditch: Final report. Prepared for the U.S. Fish and Wildlife Service.
- Siskiyou County Resource Conservation District. (1996, 1998). *Temperature monitoring on the Scott River.*
- Siskiyou County Resource Conservation District. (2001). Water temperatures in the Scott River watershed in Northern California. Prepared for the U.S. Fish and Wildlife Service.
- Siskiyou County Resource Conservation District. (2002). Scott River stream inventory reports: Cabin Meadows Creek, Grouse Creek, Houston Creek, Kangaroo Creek, and Rail Creek.
- Siskiyou County Resource Conservation District. (2002–2024). Scott River adult coho spawning ground surveys: 2001–2024 seasons. Prepared for the U.S. Fish and Wildlife Service.
- Siskiyou County Resource Conservation District. (2003). *Finley Ranch enhancement project.*
- Siskiyou County Resource Conservation District. (2005). Sugar Creek stream inventory report.
- Siskiyou County Resource Conservation District. (2006). Scott River summer habitat utilization study.
- Siskiyou County Resource Conservation District. (2007). *Evaluation of gaining and losing reaches of the Scott River.* Prepared for the North Coast Regional Water Quality Control Board.

- Siskiyou County Resource Conservation District. (2009). *Scott River Riparian Restoration Analysis*. Prepared for the U.S. Fish and Wildlife Service.
- Siskiyou County Resource Conservation District. (2009). Scott River Water Trust monitoring report: 2009.
- Siskiyou Resource Conservation District. (2010). Scott River spawning gravel evaluation and enhancement plan.
- Siskiyou County Resource Conservation District. (2010). Stream discharge gauging in the Scott River: Water years 2009–2010.
- Siskiyou County Resource Conservation District. (2013). Scott River Water Trust monitoring reports: 2011–2012.
- Siskiyou County Resource Conservation District. (2014). Flow data analysis report: 2011–2013 Scott River groundwater study plan implementation.
- Siskiyou County Resource Conservation District. (2017). *Kidder Creek Hydrology Study:*Flow monitoring final report. Prepared for Stillwater Ecosystem, Watershed &
  Riverine Sciences and the Barker Ditch Water Users.
- Siskiyou County Resource Conservation District. (2021). Scott River Stream Restoration and Sediment Reduction Program: 2017–2021 final report.
- Siskiyou County Resource Conservation District. (2023). Scott River stream inventory reports: East Fork Scott River and Noyes Valley Creek.
- Siskiyou County Resource Conservation District. (2024). Scott River Mainstem Flow and Water Quality Monitoring Project: 2023 & 2024 annual reports.
- Siskiyou County Resource Conservation District. (2024). *Scott River stream inventory report:* 2023–2024.
- Siskiyou County Resource Conservation District. (2024). South Fork Scott River Floodplain Improvement Phase II: Final report.
- Siskiyou County Resource Conservation District. (2025). Lower Scott River Valley restoration & off-channel development: Phase 2 final report.
- Siskiyou County Superior Court. (1950). "In the Matter of the Determination of the Rights of the Various Claimants to the Waters of Shackleford Creek and its Tributaries in Siskiyou County, CA, No. 13775." Decree No. 13775. The Superior Court of the State of California in and for the County of Siskiyou.
- Siskiyou County Superior Court. (1958). French Creek Adjudication: Decree No. 14478, French Creek Stream System within California in County of Siskiyou. The Superior Court of the State of California in and for the County of Siskiyou.

- Siskiyou County Superior Court. (1980). Scott River Adjudication: Decree No. 30662, Scott River Stream System within California in County of Siskiyou. The Superior Court of the State of California in and for the County of Siskiyou.
- Sommarstrom, S. (2001). Scott River monitoring plan: sediment sampling and analysis.

  Prepared for the Siskiyou Resource Conservation District & Scott River

  Watershed Council.
- Sommarstrom, S., Kellogg, E., & Kellogg, J. (1990). Scott River Watershed Granitic Sediment Study. Siskiyou Resource Conservation District. Prepared for the Klamath River Basin Fisheries Task Force, U.S. Fish and Wildlife Service.
- Sommarstrom, S., & Thamer, P. (2013). *Kidder Creek's Barker Ditch Study Reach:*Assessment of the 2012 season. Prepared for the Scott River Water Trust.
- State Water Resources Control Board. (1971). Report of investigation pursuant to petition for adjudication, Scott River, Siskiyou County.
- State Water Resources Control Board. (1974). Report on water supply and use of water in the Scott River stream system. Division of Water Rights.
- State Water Resources Control Board. (1975). Abstract of Proofs of Claims, Scott River Stream System, Scott River Adjudication, Siskiyou County, California.
- State Water Resources Control Board. (1975). Report on the hydrogeologic conditions of Scott Valley, Siskiyou County, California.
- State Water Resources Control Board. (1976). *Proposed principles for Scott River Adjudication*. Division of Water Rights.
- State Water Resources Control Board. (2020). Lower Klamath Project License Surrender Final Environmental Impact Report, Volume III. Prepared by Stillwater Sciences.
- State Water Resources Control Board. (2021). *Continued dry conditions prompt early warning about potential water shortages.* Division of Water Rights.
- State Water Resources Control Board. (2021). Proposed emergency regulation and informative digest: Establishment of minimum instream flow requirements, curtailment authority, and information order authority in the Klamath Watershed.
- State Water Resources Control Board. (2022). Public Meeting to Inform Re-Adoption of Drought Emergency Regulations for Scott River and Shasta River Watersheds (May 4, 2022). URL:

  <a href="https://youtube.com/embed/C2pG6lBgw6E?modestbranding=1&rel=0&autoplay=1">https://youtube.com/embed/C2pG6lBgw6E?modestbranding=1&rel=0&autoplay=1</a>
- State Water Resources Control Board. (2022). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.

- State Water Resources Control Board. (2023). Board Meeting to Consider Adoption of Proposed Emergency Regulation (December 19, 2023). URL: https://www.youtube.com/watch?v=SdS4uDeflq8
- State Water Resources Control Board. (2023). Preliminary Draft Proposed Emergency Regulation for Scott River and Shasta River watersheds and Virtual Meeting (November 14, 2023). URL: https://youtu.be/26sE7-uysK8
- State Water Resources Control Board. (2023). Staff Workshop Regarding Emergency Regulation Efforts in the Scott River and Shasta River Watersheds (October 6, 2023). URL: <a href="https://www.youtube.com/watch?v=CPVYmkMFmRg">https://www.youtube.com/watch?v=CPVYmkMFmRg</a>
- State Water Resources Control Board. (2024). Board Meeting on Flow Efforts in the Scott River and Shasta River (October 16, 2024). URL:

  <a href="https://www.youtube.com/watch?v=-xXUpGcTN80">https://www.youtube.com/watch?v=-xXUpGcTN80</a>
  State Water Resources
  Control Board. (2024). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.
- State Water Resources Control Board. (2024). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.
- State Water Resources Control Board. (2024). Resolution No. 2024-0036: Regarding flow efforts in the Scott River and Shasta River watersheds.
- State Water Resources Control Board. (2025). Board Meeting to Consider Adoption of Proposed Emergency Regulation (January 7, 2025). URL: https://www.youtube.com/watch?v=sYZHMLBtKiY
- State Water Resources Control Board. (2025). *Electronic Water Rights Information Management System (eWRIMS) Database.*
- State Water Resources Control Board. (2025). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.
- Stenhouse, S., Bean, C. E., Chesney, W. R., & Pisano, M. S. (2012). *Temperature thresholds for coho salmon habitat management*. California Fish and Game, 98(1), 19–29.
- Tennant, D. L. (1976). *Instream flow regimens for fish, wildlife, recreation, and related environmental resources.* Fisheries, 1(4), 6–10.
- Tessmann, S. (1980). Environmental Assessment, Technical Appendix E in Environmental Use Sector Reconnaissance Elements of the Western Dakotas Region of South Dakota Study. Water Resources Research Institute, South Dakota State University.
- Thompson, T. Q., Bellinger, M. R., O'Rourke, S. M., Prince, D. J., Stevenson, A. E., Rodrigues, A. T., & Miller, M. R. (2018). *Anthropogenic habitat alteration leads to*

- rapid loss of adaptive variation and restoration potential in wild salmon populations. Proceedings of the National Academy of Sciences, 115(35).
- Tolley, D., Foglia, L., & Harter, T. (2019). Sensitivity analysis and calibration of an integrated hydrologic model in an irrigated agricultural basin with a groundwater-dependent ecosystem. Water Resources Research, 55.
- Trihey & Associates, Inc. (1996). *Instream Flow Requirements for Tribal Trust Species in the Klamath River.* Prepared for the Yurok Tribe.
- University of California, Davis. (2016). Scott Valley Voluntary Private Well Monitoring Program Summary: Spring 2006 – January 2016. University of California, Davis.
- University of California, Davis. (2024). *Groundwater in working landscapes. Nora S. Gustavsson Endowed Professorship & Cooperative Extension.* Website.
- U.S. Bureau of Reclamation. (2005). *Undepleted natural flow of the Upper Klamath River: Final report.*
- U.S. Department of Agriculture. (1913). *Irrigation resources of California and their utilization (Bulletin 254)*.
- U.S. Department of Agriculture. (1971). Watershed investigation report on Kidder Creek.
- U.S. Fish and Wildlife Service. (1991). Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program.
- U.S. Fish and Wildlife Service. (2013). Study Plan to Assess Shasta River Salmon and Steelhead Recovery Needs.
- U.S. Forest Service. (1988). Steelhead spawner escapement and habitat utilization in selected Scott River tributaries.
- U.S. Forest Service. (1989). 1988–1989 evaluation of fish habitat condition and utilization in Salmon, Scott, Shasta, and mid-Klamath sub-basin tributaries.
- U.S. Forest Service. (2011–2024). Scott River adult Fall Chinook salmon spawning ground surveys: 2010–2023.
- U.S. Geological Survey. (1915). Springs of California (Water-Supply Paper 338).
- U.S. Geological Survey. (1958). Geology and groundwater features of Scott Valley, Siskiyou County, California (Water-Supply Paper 1462).
- U.S. Geological Survey. (1969). *Discharge measurements at gaging stations*. Techniques of Water-Resources Investigations, Book 3, Chapter A8.
- U.S. Geological Survey. (2004). Evaluation of methods used for estimating selected streamflow statistics, and flood frequency and magnitude, for small basins in North Coastal California Scientific Investigations Report 2004-5068.

- U.S. Geological Survey. (2008). *Documentation of a Conduit Flow Process for MODFLOW-2005*. Techniques and Methods, Book 6, Chapter A24.
- U.S. Geological Survey. (2008). *On mapping fracture networks onto continuum.* Water Resources Research, 44, W08435.
- U.S. Geological Survey. (2025). Scott River near Fort Jones, CA Gage No. 11519500. USGS Water Resources. Website.
- Van Kirk, R. W., & Naman, S. W. (2008). *Relative effects of climate and water use on base-flow trends in the lower Klamath Basin*. Journal of the American Water Resources Association, 44(4), 1035–1052.
- Vogel, D. A. (2003). Salmon rearing habitats in the mainstem Klamath River.
- Watershed Sciences, LLC. (2004). Aerial surveys using thermal infrared and color videography: Scott River and Shasta River sub-basins. Prepared for the California North Coast Regional Water Quality Control Board and the University of California, Davis.
- Willis, A. D., Campbell, A. M., Fowler, A. C., Babcock, C. A., Howard, J. K., Deas, M. L., & Nichols, A. L. (2015). *Instream flows: New tools to quantify water quality conditions for returning adult Chinook salmon*. Journal of Water Resources Planning and Management, 141(11), 04015056.
- Willis, A. D., Nichols, A. L., Holmes, E. J., Jeffres, C. A., Fowler, A. C., Babcock, C. A., & Deas, M. L. (2017). Seasonal aquatic macrophytes reduce water temperatures via a riverine canopy in a spring-fed stream. Freshwater Science, 36(3).
- Willis, A. D., & Holmes, E. (2019). Eye in the sky: Using UAV imagery of seasonal riverine canopy growth to model water temperature. Hydrology, 6(1), 6.
- Zillig, K. W., Lusardi, R. A., & Fangue, N. A. (2018). *Variation in thermal eco-physiology among California salmonids: Implications for management.* University of California, Davis.

## II. Information Related to Economic Analysis

- ABC 30 Action News. (2014). With wells drying up, residents turn to water trucks. Published July 24, 2014.
- Agri-Pulse. (2023). Ranchers feel unfairly tied into drought emergency order. Published on April 5, 2023.
- California Department of Fish and Wildlife. (2023). *CA Salmon Revenue Estimates to NMFS (July 31, 2023)*. Submitted to the National Marine Fisheries Service.
- California Department of Tax and Fee Administration. (2013-2025). *California sales and use tax rates by county and city.* Website.
- California Energy Commission. (1990-2025). *California electricity statistics & data.*Website.
- California Department of Fish and Wildlife. (2024). Ocean Recreational and In-River Salmon Sport Fisheries in California Closed for Second Consecutive Season.
- California Department of Fish and Wildlife. (2024). Ocean salmon fishery information.
- CNBC. (2015). *California's four-year drought starts a 'water truck' boom.* Published April 8, 2015.
- Cole, S. A., & MedellÍn-Azuara, J. (2021). Siskiyou County agricultural economics analysis considering groundwater regulation. University of California, Merced.
- Daily Kos. (2024). *It's official: California salmon fishing closed again this year!* Published April 10, 2024.
- Department of Water Resources. (2014-2023). Statewide crop mapping. Website.
- ECONorthwest. (1999). Salmon and the economy: A handbook for understanding the issues in Washington and Oregon.
- Gresh, T., Lichatowich, J., & Schoonmaker, P. (2000). An estimation of historic and current levels of salmon production in the Northeast Pacific ecosystem: Evidence of a nutrient deficit in the freshwater systems of the Pacific Northwest. Fisheries, 25(1), 15-21.
- The Guardian. (2023). Ranchers' rebellion: The Californians battling state water rules in the American West. Published on September 22, 2022.
- Hackett, S. C., & Hansen, M. D. (2008). *Costs and economic characteristics of California salmon fisheries*. Humboldt State University. Prepared for the National Marine Fisheries Service.
- Headwaters Economics. (2016). Dam removal: Case studies on the fiscal, economic, social, and environmental benefits of dam removal.

- Howitt, R. E. (1995). *Positive mathematical programming.* American Journal of Agricultural Economics, 77(2), 329-342.
- Howitt, R. E., Medellín-Azuara, J., MacEwan, D., & Lund, J. R. (2012). *Calibrating disaggregate economic models of agricultural production and water management.*
- Kruse, S. A., & Scholz, A. J. (2006). *Preliminary economic assessment of dam removal: The Klamath River.* Retrieved from Siskiyou County Economic Assessment Final Report.
- Langdon-Pollock, J. (2004). West Coast marine fishing community descriptions. Prepared for the Pacific States Marine Fisheries Commission, Economic Fisheries Information Network.
- Lewis, D. J., Dundas, S. J., Kling, D. M., Lew, D. K., & Hacker, S. D. (2019). *The non-market benefits of early and partial gains in managing threatened salmon*. PLoS ONE, 14(8).
- M-Cubed. (2015). Economic impact analysis: Executive Order B-29-15. State of emergency due to severe drought conditions. Prepared for the California State Water Resources Control Board.
- Meehan, M. A., Stokka, G., and Mostrom, M. (2021). *Livestock Water Requirements*. North Dakota State University.
- Michael, J. (2010). *Employment impacts of California salmon fishery closures in 2008 and 2009*. University of the Pacific, Business Forecasting Center.
- Moody's Investors Service. (2014). *California drought dries up agriculture, but tax revenues keep flowing.* Published May 20, 2024.
- National Marine Fisheries Service. (2008). *Habitat restoration cost references for salmon recovery planning.*
- National Marine Fisheries Service. (2022). *Fisheries economics of the United States*, 2022.
- National Public Radio (NPR). (2023). California salmon fishing slated to shut down this year due to low stock. Published on April 7, 2023.
- The New York Times. (2023). *California salmon stocks are crashing. A fishing ban looks certain.* Published April 3, 2023.
- Norman, K., Sepez, J., Lazrus, H., Milne, N., Package, C., Russell, S., Grant, K., Lewis, R. P., Primo, J., Springer, E., Styles, M., Tilt, B., & Vaccaro, I. (2007). Community profiles for West Coast and North Pacific fisheries—Washington, Oregon, California, and other U.S. states.

- Pacific Coast Federation of Fishermen's Associations. (2022). The value of salmon to the state of Oregon.
- Pacific Fishery Management Council. (2016). Klamath Dam Removal Overview Report for the Secretary of the Interior: An assessment of science and technical information.
- Pacific Fishery Management Council. (2021–2025). Review of Ocean Salmon Fisheries: Stock Assessment and Fishery Evaluation Document for the Pacific Coast Salmon Fishery Management Plan: Annual reports for 2020–2024.
- Pacific Fishery Management Council. (2025). *Pre-season Report I: Stock abundance analysis and environmental assessment for 2025 ocean salmon fishery regulations.*
- Pacific Rivers Council, Inc. (1992). The economic imperative of protecting riverine habitat in the Pacific Northwest.
- Pomeroy, C., Thomson, C. J., & Stevens, M. M. (2010). *California's North Coast fishing communities: Historical perspective and recent trends.* Final report to the California Coastal Conservancy. California Sea Grant Program, Scripps Institution of Oceanography, University of California.
- Schwarzenegger, A. (2006). Letter to U.S Secretary of Commerce requesting commercial fishery failure declaration (April 5, 2006). Office of the Governor, State of California.
- Shilling, F., Negrette, A., Biondini, L., & Cardenas, S. (2014). *California Tribes Fish-Use: Final Report.* University of California, Davis. Report for the State Water
  Resources Control Board and the U.S. Environmental Protection Agency.
- Siskiyou County. (2014-2022). Annual crop & livestock reports.
- Southwick Associates. (2012). Economic impact estimates associated with recreational and commercial salmon fishing in California.
- Spain, G. (1998). The cost of doing nothing: The economic burden of salmon declines in the Klamath Basin. Institute for Fisheries Resources.
- State of California. (2025). 2025-26 Governor's Budget: Trailer bill language tracking report.
- State Water Resources Control Board. (2018). Appendix G: Agricultural economic effects of Lower San Joaquin River flow alternatives.
- State Water Resources Control Board. (2023). Racial equity action plan 2023–2025.
- U.S. Fish & Wildlife Service. (2024). People of the salmon. Published on May 24, 2023.
- U.S. Department of Agriculture. (2025). California direct hay reports. Website.

- U.S. Department of Commerce. (1994-2024). *Various declarations and determinations regarding West Coast salmon fishery failures and fishery resource disasters.*
- University of California Cooperative Extension. (2001). Siskiyou Stockman: A report for Siskiyou livestock producers.
- University of California, Davis, & University of California Cooperative Extension. (2015). Sample costs to establish or reestablish and produce pasture using flood irrigation in the Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2015). Sample costs to produce pasture using flood irrigation in the Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2016). Sample costs to establish and produce orchardgrass hay in Shasta, Lassen, and Siskiyou Counties.
- University of California, Davis, & University of California Cooperative Extension. (2017). Sample costs for beef cattle: Cow-calf production in the Northern Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2017). Sample costs for beef cattle finished on grass in Northern Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2020). Sample costs to establish and produce alfalfa hay in the Scott Valley.
- Yurok Tribe. (2016-2024). Requests for commercial fishery disaster declarations for the Yurok Klamath River commercial fishery. Submitted to the U.S. Secretary of Commerce.

# Attachment B: Shasta River Watershed – List of Scientific, Technical, and Economic Information Related to Development of Economic Analysis and Scientific Basis Report(s) for Baseline Minimum Flows in the Scott River and Shasta River Watersheds

Below are scientific, technical, and economic references and resources that the Board has compiled to support the development of an economic analysis and scientific basis report(s) for the Shasta River. The references are generally broken out into two sections: (I.) Scientific Basis Report(s) – related; and (II.) Economic Analysis – related. Please note that reports containing both economic and scientific information may appear only in one list, but that the Board has the reports available for consideration in either context. Please also note that information related to both the Scott River and Shasta River watersheds is duplicated in both attachments. Additionally, this list is intended to be broad, and the Board may not ultimately end up relying on all of the sources below. Refer to Attachment A for references and resources identified for the Scott River watershed.

# I. Information Related to Scientific Basis Report(s)

- Adams, C.C. (2013). Shasta River juvenile coho salmon habitat and migration study, Brood Year 2010. Prepared for the U.S. Bureau of Reclamation, Klamath Area Office.
- Adams, C. C. (2013). Survival and movement of juvenile coho salmon (Oncorhynchus kisutch) in the Shasta River, California (Master's Thesis). Humboldt State University.
- AquaTerra Consulting. (2011). *Mount Shasta Springs vulnerability ratings and water year forecasting.* Prepared for California Trout.
- Asarian, J. E., & Kann, J. (2013). Synthesis of continuous water quality data for the Lower and Middle Klamath River, 2001–2011. Prepared for the Klamath Basin Tribal Water Quality Work Group.
- Asarian, J. E., & Walker, J. D. (2016). Long-term trends in streamflow and precipitation in Northwest California and Southwest Oregon, 1953–2012. Journal of the American Water Resources Association, 1–21.
- Asarian, J. E. (2017). GIS stream temperature modeling of Yurok Ancestral Territory. Prepared for the Yurok Tribe.
- Asarian, J. E., Cressey, L., Bennett, B., Grunbaum, J., Cyr, L., Soto, T., & Robinson, C. (2020). *Influence of snowpack, streamflow, air temperature, and wildfire smoke on Klamath Basin stream temperatures, 1995–2017.* Prepared for the Klamath Tribal Water Quality Consortium.

- Asarian, J. E. (2023). Evaluating the hydrologic effects of the 2021–2022 Scott and Shasta irrigation curtailments using remote sensing and streamflow gages. Prepared for the Klamath Tribal Water Quality Consortium.
- Asarian, J. E., Kann, J., & Perkins, K. (2023). *Temperature dynamics and trends in Upper Klamath Basin tributaries: Assessment of The Klamath Tribes long-term thermograph monitoring program.*
- Balance Hydrologics, Inc. (1998). Existing flows, ground-water, and water-quality influences on habitat values in the Shasta Valley. Prepared for the Yurok Tribe.
- Belchik, M. (2023). Status of the Klamath River Fishery. Prepared for the Yurok Tribe.
- Brown, L. R., & Moyle, P. B. (1991). Status of coho salmon in California: Report to the National Marine Fisheries Service. University of California, Davis.
- Buck, C. R. (2013). *Managing groundwater for environmental stream temperature* (Doctoral Dissertation). University of California, Davis.
- California Coastkeeper Alliance, Friends of the Shasta River, Mt. Shasta Bioregional Ecology Center, Water Climate Trust, Shasta Waterkeeper, Save California Salmon, & Environmental Protection Information Center. (2023). *Petition for rulemaking to set minimum flows on the Shasta River.* Submitted to the State Water Resources Control Board.
- California Coastkeeper Alliance, Friends of the Shasta River, Mount Shasta Bioregional Ecology Center, Water Climate Trust, Shasta Waterkeeper, Save California Salmon, & Environmental Protection Information Center. (2024). *Petition to reconsider denial of a petition to set minimum flows on the Shasta River.*Submitted to the State Water Resources Control Board.
- California Data Exchange Center. (2025). Shasta River and tributary gages: Shasta River Near Yreka (SRY), Shasta River Near Edgewood (SRE), Shasta River Below Dwinnell (SRD), Parks Big Springs (PBS), Little Springs Creek Near Grenada (LTG), Big Springs Creek Near Grenada (BGG), Shasta River Near Grenada (SRG), Shasta River Above County Road A-12 Near Grenada (SAG), Shasta River Below County Road A-12 Near Grenada (SBG), Little Shasta River Below Big Springs Road (LSS), Little Shasta River Near Montague (LSR), Yreka Creek at Anderson Grade Road (YCK), MWCD Parks Creek Diversion Near Edgewood (MPD), and Shasta River at Grenada Pump Plant (SPU). California Department of Water Resources. Website.
- California Department of Fish and Game. (1930). *The salmon migration in the Shasta River* (1930-1934).
- California Department of Fish and Game. (1931). Salmon of the Klamath River, California (Fish Bulletin No. 34).

- California Department of Fish and Game. (1933). A steelhead migration in the Shasta River.
- California Department of Fish and Game. (1966). *California fish and wildlife plan:* Volume 1.
- California Department of Fish and Game. (1978). Coho catch numbers and adult sampling techniques in the Shasta River.
- California Department of Fish and Game. (1997). A biological needs assessment for anadromous fish in the Shasta River.
- California Department of Fish and Game. (1997). Evaluation of salmon and steelhead spawning habitat quality in the Shasta River Basin.
- California Department of Fish and Game. (2000). Annual report: Shasta and Scott River juvenile steelhead trapping, 2000.
- California Department of Fish and Game. (2000–2012). Annual reports: Shasta and Scott River juvenile salmonid outmigrant studies and monitoring reports: 2000–2012.
- California Department of Fish and Game. (2002). Status review of California coho salmon north of San Francisco. Prepared for the California Fish and Game Commission.
- California Department of Fish and Game. (2003). Recommendations relating to agriculture and agricultural water use. Shasta-Scott Coho Salmon Recovery Team.
- California Department of Fish and Game. (2004). *Recovery strategy for California coho salmon*. Report to the California Fish and Game Commission.
- California Department of Fish and Game. (2005). Field note: Shasta River (July 7-8, 2005).
- California Department of Fish and Game. (2005). Field note: Shasta River side channel at Salmon Heaven (June 30, 2005).
- California Department of Fish and Game. (2006). Shasta River coho salmon radio telemetry investigation, 2004.
- California Department of Fish and Game. (2009). Shasta River juvenile coho habitat & migration study: Brood Year 2007. Prepared for the U.S. Bureau of Reclamation.
- California Department of Fish and Game. (2010). *Instream Flow Program: Annual Report*, 2009.
- California Department of Fish and Game. (2011). California coastal salmonid population monitoring: Strategy, design, and methods (Fish Bulletin 180).

- California Department of Fish and Game. (2011). Historical occurrence of coho salmon in the upper Klamath, Shasta, and Scott Rivers.
- California Department of Fish and Game. (2011). Shasta Springs Ranch irrigation efficiency study.
- California Department of Fish and Game. (2011). Summary of water diversion impacts.
- California Department of Fish and Game. (2012). Shasta River Chinook and coho salmon observations in 2011-2012.
- California Department of Fish and Game. (2012). *Spring-run highlights: Coho salmon habitat conditions and management considerations.* California Fish and Game, 98(1), 19–29.
- California Department of Fish and Game & Cowley and Hart Ranches. (2012). *Little Shasta River water efficiency study.*
- California Department of Fish and Wildlife. (2013). Standard operating procedure for critical riffle analysis for fish passage in California.
- California Department of Fish and Wildlife. (2013–2020). Shasta and Scott River juvenile salmonid outmigrant studies and monitoring reports: 2013-2020.
- California Department of Fish and Wildlife. (2014). Shasta River Chinook and coho salmon observations in 2013.
- California Department of Fish and Wildlife. (2015). Recovery strategy for California coho salmon: Progress report 2004–2012. Prepared for the California Fish and Game Commission.
- California Department of Fish and Wildlife. (2015). Shasta River Chinook and coho salmon observations in 2015.
- California Department of Fish and Wildlife. (2016). *Little Shasta River: A compendium of available information.*
- California Department of Fish and Wildlife. (2016). Shasta River Brood Year 2013 juvenile coho salmon PIT tagging study.
- California Department of Fish and Wildlife. (2016). Shasta study plan priorities. Region 1.
- California Department of Fish and Wildlife. (2016). *Three-year report 2013–2015:*Shasta and Scott River juvenile salmonid outmigrant study.
- California Department of Fish and Wildlife. (2017). *Proposal to remove three culverts from Little Springs Creek.*

- California Department of Fish and Wildlife. (2017). Shasta River water temperature monitoring: January–June 2017.
- California Department of Fish and Wildlife. (2018). Report of Licensee for 2017 (Application A010949A, Permit 006408). Submitted to the State Water Resources Control Board.
- California Department of Fish and Wildlife. (2018). Shasta River PIT Tag Juvenile Salmonid Monitoring Project: Juvenile coho response to changing habitat conditions in the Shasta River.
- California Department of Fish and Wildlife. (2019). Reports of Licensee for 2018 (Applications A010949A [License 005066A] and A010949B [License 005066B]). Submitted to the State Water Resources Control Board.
- California Department of Fish and Wildlife. (2019–2022). Shasta River salmonid monitoring: Annual reports (2018–2021).
- California Department of Fish and Wildlife. (2020). Reports of Licensee for 2019 (Applications A010949A [License 005066A], A010949B [License 005066B], A011705 [License 005067], A013462A [License 008647A], A013462B [License 008647B], A014580 [License 005068], A023117 [License 010704], A023452A [License 011119], A023452B [License 010705]). Submitted to the State Water Resources Control Board.
- California Department of Fish and Wildlife. (2021). Letter to the State Water Resources Control Board regarding minimum flow recommendations for the Shasta and Scott Rivers (June 15, 2021).
- California Department of Fish and Wildlife. (2021). Shasta River Chinook and coho salmon observations in 2020.
- California Department of Fish and Wildlife. (2021). Yreka RST update (February 5, 2021).
- California Department of Fish and Wildlife. (2022). Letter to the State Water Resources Control Board regarding the re-adoption of drought emergency regulation on the Shasta and Scott Rivers with modified and additional recommendations (April 20, 2022).
- California Department of Fish and Wildlife. (2022). Scott and Shasta River juvenile salmonid outmigration monitoring: In-season updates (January 28–June 17, 2022).
- California Department of Fish and Wildlife. (2023). *Influence of flow and temperature on Shasta River salmonids as observed through snorkel surveys.*
- California Department of Fish and Wildlife. (2023). Letter to the Siskiyou County Farm Bureau regarding "Podlech Memo: Review of CDFW Recommendations for the

- 2022 Readoption of Drought Emergency Regulations on the Shasta River and Recommendations for Alternative Instream Flow Management During Extreme Drought Conditions" (March 17, 2023.)
- California Department of Fish and Wildlife. (2023). Shasta and Scott River juvenile salmonid outmigration monitoring: In-season updates (March 21 & April 5, 2023).
- California Department of Fish and Wildlife. (2023). *Upper Klamath-Trinity rivers fall-run Chinook salmon (Oncorhynchus tshawytscha) status review.*
- California Department of Fish and Wildlife. (2024). Klamath River Basin Fall Chinook Salmon Spawner Escapement, In-river Harvest and Run-size Estimates, 1978-2023.
- California Department of Fish and Wildlife. (2024). Letter to the State Water Resources Control Board regarding the re-adoption of drought emergency regulation on the Shasta and Scott Rivers (November 20, 2024).
- California Department of Fish and Wildlife. (2024). Shasta and Scott River Juvenile Salmonid Outmigration Monitoring: In-Season Update JW23.
- California Department of Public Works. (1922). Engineer's report on the water supply and use of water from the Shasta River. Division of Water Rights.
- California Department of Public Works. (1925). Report on water supply and use of water from Shasta River and tributaries: Shasta River adjudication proceedings.

  Division of Water Rights.
- California Department of Public Works. (1933). Order creating the Shasta River Watermaster District, Siskiyou County, California. Division of Water Rights.
- California Department of Public Works. (1941). Order supplementing and revising the description of lands within Shasta River Watermaster District, Siskiyou County, CA. Division of Water Rights.
- California Department of Water Resources. (1957). Order reducing Shasta River Watermaster Service Area, Siskiyou County, CA.
- California Department of Water Resources. (1964). Shasta Valley investigation (Bulletin No. 87).
- California Department of Water Resources. (1965). Bulletin 94-5: Land and Water Use in Shasta-Scott Valleys Hydrographic Unit (Volumes I & II: Text and Plates).
- California Department of Water Resources. (1976). *Eel-Russian Rivers streamflow augmentation studies: Scott Dam-Lake Pillsbury (Bulletin No. 105-5).*
- California Department of Water Resources. (1981). *Klamath and Shasta River spawning gravel enhancement study.*

- California Department of Water Resources. (2000). Summary of operations for Watermaster Service in Northern California: 1998 season.
- California Department of Water Resources. (2003). California's groundwater: Shasta Valley Groundwater Basin (Bulletin 118).
- California Department of Water Resources. (2007). Shasta Valley data needs assessment.
- California Department of Water Resources. (2024). Land use surveys.
- California Environmental Flows Working Group. (2021). *California Natural Flows Database: Functional flow metrics v1.2.1.* URL: <a href="https://rivers.codefornature.org/">https://rivers.codefornature.org/</a>
- Cannon, T. (2011). Removal of Dwinnell Dam and alternatives: Draft concepts report.

  Prepared for the Karuk Tribe.
- Carlson, M. C., & Satterthwaite, W. H. (2011). Weakened portfolio effect in a collapsed salmon population complex. Canadian Journal of Fisheries and Aquatic Sciences, 68(9), 1579–1589.
- Carlson, S. R., Coggins, L. G., & Swanton, C. O. (1998). *A simple stratified design for mark-recapture estimation of salmon smolt abundance*. Alaska Fishery Research Bulletin, 5(2), 88–102.
- Center for Biological Diversity, Oregon Wild, Environmental Protection Information Center, & The Larch Company. (2011). *Petition to list Upper Klamath Chinook salmon (Oncorhynchus tshawytscha) as a threatened or endangered species*. Submitted to the U.S. Fish and Wildlife Service.
- Cordalis, A. (2021). Testimony of Amy Cordalis on behalf of the Yurok Tribe before the U.S. House Subcommittee on Water, Oceans, and Wildlife on drought impacts in the Klamath Basin (May 25, 2021). United States House of Representatives.
- David, A. T., Asarian, J. E., & Lake, F. K. (2018). *Wildfire smoke cools summer river and stream water temperatures.* Water Resources Research, 54.
- Davids Engineering, Inc. (2010). *Hydrogeologic assessment of the Cowley and Hart Ranches, Little Shasta Valley, California*. Prepared for the California Department of Fish and Game and the Pacific States Marine Fisheries Commission.
- Davids Engineering, Inc. (2011). Shasta Springs Ranch groundwater assessment: Hydrogeologic investigation. Prepared for the California Department of Fish and Game.
- Davids Engineering, Inc. (2011). Shasta Springs Ranch Irrigation Efficiency Study.

  Prepared for the California Department of Fish and Game.

- Davids, J. C. (2011). Spatial and temporal analysis of stream restoration efforts in depleted aquifer systems (Master's thesis). California State University, Chico.
- Davy, P., & Méheust, Y. (2010). Scaling laws of discrete-fracture-network models: Flow and transport in fractured media.
- Deas, M. (2006). Technical Memorandum on the Big Springs Creek and Spring Complex Estimates of Shasta River Contributions. Prepared for the North Coast Regional Water Quality Control Board.
- Foglia, L., McNally, A., & Harter, T. (2013). Coupling a spatiotemporally distributed soil water budget with stream-depletion functions to inform stakeholder-driven management of groundwater-dependent ecosystems. Water Resources Research, 49(12), 7292–7310.
- Foglia, L., J. Neumann, D.G. Tolley, S.B. Orloff, R.L. Snyder, and T. Harter. (2018). Modeling guides groundwater management in a basin with river–aquifer interactions. University of California, Davis.
- Fujiwara, M. (2008). *Identifying interactions among salmon populations from observed dynamics*. Ecology, 89(1), 4–11.
- Grenada Irrigation District. (2008). *Water balance analysis of the 2006 and 2007 irrigation seasons*. Prepared in cooperation with The Nature Conservancy.
- Han, J. J. (2011). Spatial dynamic groundwater regulation to ensure adequate instream flows for salmon (Master's Thesis). University of Illinois at Urbana-Champaign.
- Hardy, T. B., Addley, R. C., & Saraeva, E. (2006). Evaluation of instream flow needs in the lower Klamath River: Phase II final report (Revised October 16, 2006).

  Prepared for the U.S. Department of the Interior. Utah Water Research Laboratory, Utah State University.
- Hardy, T. B., Perry, R., Williamson, S., & Shaw, T. (2012). *Application of a salmonid life cycle model for evaluation of alternative flow regimes.*
- Hatfield, T., & Bruce, J. (2000). *Predicting salmonid habitat–flow relationships for streams from western North America*. North American Journal of Fisheries Management, 20(4), 1005–1015.
- Hébert, A. (2016). *Impacts to anadromous fish through groundwater extraction (Master's Project)*. University of San Francisco.
- Institute for Natural Systems Engineering, Utah Water Research Laboratory. (1999). Evaluation of interim instream flow needs in the Klamath River: Phase I final report. Prepared for the U.S. Department of the Interior.
- Jeffres, C.A., Buckland, E., Hammock, B., Kiernan, J., King, A., Krigbaum, N., Nichols, A., Null, S., Mount, J., Moyle, P., & Deas, M. (2008). *Baseline assessment of*

- salmonid habitat and aquatic ecology of the Nelson Ranch, Shasta River. University of California, Davis.
- Jeffres, C. A., Dahlgren, R. A., Deas, M. L., Kiernan, J. D., King, A. M., Lusardi, R. A., Mount, J. M., Moyle, P. B., Nichols, A. L., Null, S. E., Tanaka, S. K., & Willis, A. D. (2009). Baseline assessment of physical and biological conditions within waterways on Big Springs Ranch. Prepared for the California State Water Resources Control Board.
- Jeffres, C. A., & Adams, C. C. (2019). Novel life history tactic observed in fall-run Chinook salmon. Ecology, 100(00), e02733.
- Kibel, P. S., & Gantenbein, J. (2018). *Drafting SGMA groundwater plans with fisheries in mind: A guidebook for using California's Sustainable Groundwater Management Act to protect fisheries.* Center on Urban Environmental Law, Golden Gate University School of Law.
- Lestelle, L. (2012). Effects of Dwinnell Dam on Shasta River salmon and considerations for prioritizing recovery actions. Prepared for the Karuk Tribe.
- Lukk, A., Vasquez, M., Lusardi, R., & Willis, A. (2019). *Little Shasta River pre-project assessment (2017–2019).*
- Lukk, A., & Willis, A. (2022). *Little Shasta River Hart Ranch monitoring plan.* University of California, Davis.
- Lusardi, R. A., Jeffres, C. A., & Moyle, P. B. (2018). Stream macrophytes increase invertebrate production and fish habitat utilization in a California stream. River Research and Applications, 34(8), 967–977.
- Manga, M. (1999). On the timescales characterizing groundwater discharge at springs. Journal of Hydrology, 219(1–2), 56–69.
- Manga, M. (2001). *Using springs to study groundwater flow and active geologic processes*. Annual Review of Earth and Planetary Sciences, 29(1), 201–228.
- McBain & Trush, Inc. (2009). Shasta River instream flow methods and implementation framework final report. Prepared for California Trout and California Department of Fish and Game.
- McBain & Trush, Inc. (2010). Spawning gravel evaluation and enhancement plan for the Shasta River, CA. Prepared for California Department of Fish and Game & Pacific States Marine Fisheries Commission.
- McBain & Trush, Inc., & Humboldt State University. (2013). Shasta River Big Springs Complex interim instream flow needs assessment. Prepared for the Ocean Protection Council and California Department of Fish and Wildlife.

- McBain & Trush, Inc., & Humboldt State University. (2014). Shasta River Canyon instream flow needs assessment (Final Report). Prepared for the Ocean Protection Council & California Department of Fish and Game.
- McClain, C. N. (2008). Provenance and pathways: A geochemical and isotope analysis of Mt. Shasta groundwater (Honors Thesis). University of California, Davis.
- Mid-Klamath Watershed Council. (2017). 2016 Winter Coho Spawning Survey.

  Prepared in collaboration with California Department of Fish and Wildlife, Karuk
  Tribal Fisheries Program, Klamath National Forest, and U.S. Fish and Wildlife
  Service.
- Montague Irrigation District. (1963). Geologic investigation for reservoir leakage and groundwater development.
- Moyle, P. B., Quiñones, R. M., Katz, J. V., & Weaver, J. (2015). Fish species of special concern in California.
- National Drought Mitigation Center. (2025). U.S. Drought Monitor. Website.
- Nathenson, M., Thompson, J. M., & White, L. D. (2003). Slightly thermal springs and non-thermal springs at Mount Shasta, California: Chemistry and recharge elevations. Journal of Volcanology and Geothermal Research, 121(1–2), 137–153.
- National Marine Fisheries Service. (1997). Endangered and threatened species:

  Threatened status for Southern Oregon/Northern California Coast Evolutionarily
  Significant Unit (ESU) of coho salmon. Federal Register, 62(87), 24588–24597.
- National Marine Fisheries Service. (2001). Endangered and threatened species: Final listing determination for Klamath Mountains Province steelhead. Federal Register, 66(65), 17845–17854.
- National Marine Fisheries Service. (2007). *Magnuson-Stevens Reauthorization Act Klamath River Coho Salmon Recovery Plan.*
- National Marine Fisheries Service. (2014). Final recovery plan for the Southern Oregon/Northern California Coast evolutionarily significant unit of coho salmon (Oncorhynchus kisutch).
- National Marine Fisheries Service. (2015). Endangered Species Act Section 7(a)(2)
  Concurrence Letter and Magnuson-Stevens Fishery Conservation and
  Management Act Essential Fish Habitat Response for the California Department
  of Fish and Wildlife's Grant Application for Operation and Maintenance Activities
  on the Shasta Valley Wildlife Area.
- National Marine Fisheries Service. (2016). 5-year review: Summary & evaluation of Southern Oregon/Northern California Coast coho salmon.

- National Marine Fisheries Service. (2017). NOAA's Klamath River Basin recovery and restoration progress.
- National Marine Fisheries Service. (2018). Rapid regional assessment of decreased streamflow and fish bioenergetics responses: A case study from the Klamath Basin, California.
- National Marine Fisheries Service. (2020). Endangered Species Act Section 7(a)(2)
  Biological Opinion and Magnuson-Stevens Fishery Conservation and
  Management Act Essential Fish Habitat Response: Issuance of 14 Section
  10(a)(1)(A) Enhancement of Survival Permits associated with the Template Safe
  Harbor Agreement for Conservation of Coho Salmon in the Shasta River.
- National Marine Fisheries Service. (2020). Environmental assessment: Issuance of fourteen 10(a)(1)(A) enhancement of survival permits associated with the template safe harbor agreement for the conservation of coho salmon in the Shasta River, Klamath River Basin, California.
- National Marine Fisheries Service. (2023). Letter regarding the preliminary draft emergency regulation in the Scott River & Shasta River watersheds (November 14, 2023). Submitted to the State Water Resources Control Board.
- National Marine Fisheries Service & The Hart Ranch. (2017). Safe Harbor Agreement for voluntary habitat enhancement activities benefiting Southern Oregon and Northern California Coast coho salmon on private lands in the Shasta Valley.
- National Research Council. (2004). Endangered and threatened fishes in the Klamath River Basin: Causes of decline and strategies for recovery.
- National Weather Service. (2024). Climate Prediction Center Seasonal Outlook. Website.
- The Nature Conservancy. (2016). A practitioner's guide to instream flow in California.
- Neuman, S. P. (2004). *Stochastic groundwater models in practice*. Stochastic Environmental Research and Risk Assessment, 18(4), 268–270.
- Nichols, A. (2008). Geological mediation of hydrologic process, channel morphology, and resultant planform response to closure of Dwinnell Dam, Shasta River, California (Master's thesis). University of California, Davis.
- Nichols, A., Jeffres, C. A., Willis, A. D., Corline, N. J., King, A. M., Lusardi, R. A., Deas, M. L., Mount, J. F., & Moyle, P. B. (2010). *Longitudinal baseline assessment of salmonid habitat characteristics of the Shasta River, March to September 2008.* Prepared for the United States Bureau of Reclamation.
- Nichols, A., Willis, A. D., Jeffres, C. A., & Deas, M. L. (2014). Water temperature patterns below large groundwater springs: Management implications for coho

- salmon in the Shasta River, California. River Research and Applications, 30(4), 442–455.
- Nichols, A., Willis, A., Lambert, D., Limanto, E., & Deas, M. (2016). *Little Shasta River hydrologic and water temperature assessment: April to December 2015.*Prepared for The Nature Conservancy.
- Nichols, A., Lusardi, R., & Willis, A. (2017). *Little Shasta River aquatic habitat assessment*. University of California, Davis. Prepared for The Nature Conservancy.
- Nielsen, J. L., Lisle, T. E., & Ozaki, V. (1994). *Thermally stratified pools and their use by steelhead in northern California streams*. Transactions of the American Fisheries Society, 123(4), 613–626.
- Normandeau Associates, Inc. (2013). Scott River and Shasta River study reaches. Submitted to the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2014). Shasta River cumulative hydrology and integrated surface water/groundwater modeling. Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2014). Shasta River habitat suitability criteria study. Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2014). *Shasta River hydraulic habitat modeling.*Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2014). *Shasta River mesohabitat delineation.* Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2015). Shasta River fish passage and longitudinal habitat connectivity study. Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2015). Shasta River floodplain habitat connectivity study.

  Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2015). Shasta River geomorphology: Incipient motion and sediment transport. Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2015). *Shasta River riparian vegetation assessment.*Prepared for the California Department of Fish and Wildlife.
- Normandeau Associates, Inc. (2015). *Shasta River water temperature assessment.*Prepared for the California Department of Fish and Wildlife.
- North Coast Regional Water Quality Control Board. (2005). The effects of temperature on steelhead trout, coho salmon, and Chinook salmon biology and function by life stage: Implications for Klamath Basin TMDLs.

- North Coast Regional Water Quality Control Board. (2006). Staff report for the action plan for the Shasta River watershed: Temperature and dissolved oxygen total maximum daily loads.
- North Coast Regional Water Quality Control Board. (2018). Shasta River TMDL conditional waiver of waste discharge requirements (Order No. R1-2018-0019).
- North Coast Regional Water Quality Control Board. (2022). Analysis of Mike Podlech's memo regarding CDFW instream flow recommendations for the 2022 readoption of drought emergency recommendations.
- Northwest Hydraulic Consultants. (2009). *Little Shasta River Fish Passage Project: Predesign report.* Prepared for the California Department of Fish and Game.
- Null, S. E., Deas, M. L., & Lund, J. R. (2010). Flow and water temperature simulation for habitat restoration in the Shasta River, California. River Research and Applications, 26(6), 663–681.
- Nylen, N. G., Owen, D., Harder, J., Kiparsky, M., & Hanemann, M. (2023). *Managing water scarcity: A framework for fair and effective water right curtailment in California*. University of California, Berkeley.
- Orloff, S. (n.d.). Do four cuttings of alfalfa use more water than three?
- Orloff, S., Bali, K., & Putnam, D. (2014). *Deficit irrigation of alfalfa and grasses: What are the impacts/options?* University of California Cooperative Extension.
- Orloff, S., Putnam, D., Hanson, B., & Carlson, H. (2003). *Controlled deficit irrigation of alfalfa: Opportunities and pitfalls*. University of California Cooperative Extension.
- Paradigm Environmental. (2018). Shasta River watershed characterization and model study plan. Prepared for the State Water Resources Control Board.
- Patterson, D. W. (1976). Evaluation of habitats resulting from streambank protection projects in Siskiyou and Mendocino Counties, California. Soil Conservation Service.
- Persad, G. G., Swain, D. L., Katz, C., & Ortiz Partida, J. P. (2020). *Inter-model agreement on projected shifts in California hydroclimate characteristics critical to water management*. Climatic Change, 162, 1493–1513.
- Podlech, M. (2021). *Memorandum: Review of best available information regarding*Shasta River salmonid instream flow needs during extreme drought
  (November 11, 2021). Prepared for Montague Water Conservation District.
- Podlech, M. (2022). *Memorandum: Review of CDFW recommendations for the 2022* readoption of drought emergency regulations on the Shasta River and recommendations for alternative instream flow management during extreme

- drought conditions (June 16, 2022). Submitted to the State Water Resources Control Board.
- Podlech, M. (2024). *Memorandum: Recommendations for Shasta River Drought Emergency Regulation (May 29, 2024)*. Prepared for Shasta Valley Producers.
- Poff, N. L., Allan, J. D., Bain, M. B., Karr, J. R., Prestegaard, K. L., Richter, B. D., Sparks, R. E., & Stromberg, J. C. (1997). *The natural flow regime: A paradigm for river conservation and restoration.* BioScience, 47(11), 769–784.
- PRISM Climate Group. (2024). *PRISM climate data and analysis*. Oregon State University, Northwest Alliance for Computational Science & Engineering. Website.
- Quiñones, R. M., Holyoak, M., Johnson, M. L., & Moyle, P. B. (2014). Potential factors affecting salmonid survival differ by run timing and location: Linear mixed-effects models of Pacific salmonids (Oncorhynchus spp.) in the Klamath River, California.
- R2 Resource Consultants, Inc., & Stetson Engineers, Inc. (2008). North Coast Instream Flow Policy: Scientific basis and development of alternatives—Protecting anadromous salmonids. Prepared for the State Water Resources Control Board, Division of Water Rights.
- Rhoades, S. J., Caldwell, T. J., McBain, S., Henery, R., Stauffer-Olsen, N., McKinnon, T., Rossi, G. J., & Chandra, S. (2024). *Trout bioenergetics as a process-based tool to estimate ecological risk in a regulated river.* Journal of the American Water Resources Association, 60(2), 287–304.
- Rhoades, S. J., Caldwell, T. J., Stauffer-Olsen, N., McKinnon, T., McBain, S., Henery, R., & Chandra, S. (2024). *Reduced streamflow from water diversion alters stream ecology and fish behavior.* River Research and Applications, 2024(0), 1–16.
- Roddam, C. M. L. (2014). Residency, growth, and outmigration size of juvenile Chinook salmon (Oncorhynchus tshawytscha), across rearing locations in the Shasta River, California (Master's Thesis). Humboldt State University.
- Saar, M. O. (1998). Theoretical and numerical models of fluid flow within hydrothermal systems and their application to heat flow and hydrogeologic studies (Master's Thesis). University of Oregon.
- Schindler, D. E., Scheuerell, M. D., Moore, J. W., Gende, S. M., Francis, T. B., & Palen, W. J. (2003). *Pacific salmon and the ecology of coastal ecosystems*. Frontiers in Ecology and the Environment, 1(1), 31–37.

- Shasta Valley Resource Conservation District. (2018). Shasta River Watershed Stewardship Report. Prepared in collaboration with the North Coast Regional Water Quality Control Board and the Klamath Basin Monitoring Program.
- Shasta Valley Resource Conservation District & McBain & Trush, Inc. (2012). Study plan to assess Shasta River salmon and steelhead recovery needs. Prepared for the U.S. Fish and Wildlife Service.
- Siskiyou County. (1996). Comprehensive Land and Resource Management Plan.
- Siskiyou County. (2022). Shasta Valley groundwater sustainability plan under the Sustainable Groundwater Management Act. Prepared for the California Department of Water Resources.
- Siskiyou County Superior Court. (1932). "In the Matter of the Determination of the Relative Rights Based on Prior Appropriation, of the Various Claimants to the Use of the Water of the Shasta River and its Tributaries in Siskiyou County, California, No. 7035". Judgement and Decree No. 7035.
- Siskiyou County Superior Court. (1986). "In the Matter of the Determination of the Relative Rights Based on Prior Appropriation, of the Various Claimants to the Use of the Water of the Willow Creek Stream System in Siskiyou County, California, No. 87524". Judgment and Decree No. 87524.
- Siskiyou County Superior Court. (1987). Big Springs stipulation of the judgment and decree in "In the Matter of the Determination of the Relative Rights Based on Prior Appropriation, of the Various Claimants to the Use of the Water of the Shasta River and its Tributaries in Siskiyou County, California, No. 7035".
- Smitherum, H. (1926). Engineers report on water supply available for appropriation from Shasta River and Parks Creek. Prepared for the Division of Water Rights.
- State Water Resources Control Board. (2019). Response letter regarding Water Code Section 1707 petitions for Hart Ranch water rights (July 31, 2019).
- State Water Resources Control Board. (2020). Lower Klamath Project License Surrender Final Environmental Impact Report, Volume III. Prepared by Stillwater Sciences.
- State Water Resources Control Board. (2021). Continued dry conditions prompt early warning about potential water shortages. Division of Water Rights.
- State Water Resources Control Board. (2021). Order approving temporary changes: In the matter of water right Permit 2452 (Application 3544) of Montague Water Conservation District. Division of Water Rights.
- State Water Resources Control Board. (2021). Proposed emergency regulation and informative digest: Establishment of minimum instream flow requirements, curtailment authority, and information order authority in the Klamath Watershed.

- State Water Resources Control Board. (2022). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.
- State Water Resources Control Board. (2022). Public Meeting to Inform Re-Adoption of Drought Emergency Regulations for Scott River and Shasta River Watersheds (May 4, 2022). URL: <a href="https://youtube.com/embed/C2pG6lBgw6E?modestbranding=1&rel=0&autoplay=1">https://youtube.com/embed/C2pG6lBgw6E?modestbranding=1&rel=0&autoplay=1</a>
- State Water Resources Control Board. (2023). Board Meeting to Consider Adoption of Proposed Emergency Regulation (December 19, 2023). URL: https://www.youtube.com/watch?v=SdS4uDeflq8
- State Water Resources Control Board. (2023). *Preliminary Draft Proposed Emergency Regulation for Scott River and Shasta River watersheds and Virtual Meeting (November 14, 2023).* URL: <a href="https://youtu.be/26sE7-uysK8">https://youtu.be/26sE7-uysK8</a>
- State Water Resources Control Board. (2023). Staff Workshop Regarding Emergency Regulation Efforts in the Scott River and Shasta River Watersheds (October 6, 2023). URL: <a href="https://www.youtube.com/watch?v=CPVYmkMFmRg">https://www.youtube.com/watch?v=CPVYmkMFmRg</a>
- State Water Resources Control Board. (2024). Board Meeting on Flow Efforts in the Scott River and Shasta River (October 16, 2024). URL: <a href="https://www.youtube.com/watch?v=-xXUpGcTN80">https://www.youtube.com/watch?v=-xXUpGcTN80</a>
- State Water Resources Control Board. (2024). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.
- State Water Resources Control Board. (2024). Resolution No. 2024-0036: Regarding flow efforts in the Scott River and Shasta River watersheds.
- State Water Resources Control Board. (2025). Board Meeting to Consider Adoption of Proposed Emergency Regulation (January 7, 2025). URL: https://www.youtube.com/watch?v=sYZHMLBtKiY
- State Water Resources Control Board. (2025). *Electronic Water Rights Information Management System (eWRIMS) Database.*
- State Water Resources Control Board. (2025). Proposed Scott River and Shasta River watersheds emergency regulation: Finding of emergency and informative digest.
- Stenhouse, S., Bean, C. E., Chesney, W. R., & Pisano, M. S. (2012). *Temperature thresholds for coho salmon habitat management*. California Fish and Game, 98(1), 19–29.
- Tennant, D. L. (1976). *Instream flow regimens for fish, wildlife, recreation, and related environmental resources.* Fisheries, 1(4), 6–10.

- Tessmann, S. (1980). Environmental Assessment, Technical Appendix E in Environmental Use Sector Reconnaissance Elements of the Western Dakotas Region of South Dakota Study. Water Resources Research Institute, South Dakota State University.
- Thompson, T. Q., Bellinger, M. R., O'Rourke, S. M., Prince, D. J., Stevenson, A. E., Rodrigues, A. T., & Miller, M. R. (2018). *Anthropogenic habitat alteration leads to rapid loss of adaptive variation and restoration potential in wild salmon populations*. Proceedings of the National Academy of Sciences, 115(35).
- Tolley, D., Foglia, L., & Harter, T. (2019). Sensitivity analysis and calibration of an integrated hydrologic model in an irrigated agricultural basin with a groundwater-dependent ecosystem. Water Resources Research, 55.
- Trihey & Associates, Inc. (1996). *Instream Flow Requirements for Tribal Trust Species in the Klamath River.* Prepared for the Yurok Tribe.
- University of California, Davis. (1959). *An analysis of the Montague Water Conservation District.*
- University of California, Davis. (2024). *Groundwater in working landscapes. Nora S. Gustavsson Endowed Professorship & Cooperative Extension.* Website.
- U.S. Bureau of Reclamation. (2005). *Undepleted natural flow of the Upper Klamath River: Final report.*
- U.S. Department of Agriculture. (1913). *Irrigation resources of California and their utilization (Bulletin 254).*
- U.S. Department of Agriculture. (1923). Soil survey of the Shasta Valley area, California.
- U.S. Fish and Wildlife Service. (1991). Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program.
- U.S. Fish and Wildlife Service. (1992). An issue statement on Shasta River water use and possible impacts on anadromous salmonids.
- U.S. Fish and Wildlife Service. (2013). Study Plan to Assess Shasta River Salmon and Steelhead Recovery Needs.
- U.S. Forest Service. (1989). 1988–1989 evaluation of fish habitat condition and utilization in Salmon, Scott, Shasta, and mid-Klamath sub-basin tributaries.
- U.S. Geological Survey. (1915). Springs of California (Water-Supply Paper 338).
- U.S. Geological Survey. (1959). Geology and ground-water features of Shasta Valley, Siskiyou County, California (Water-Supply Paper 1484).
- U.S. Geological Survey. (1969). *Discharge* me*asurements at gaging stations*. Techniques of Water-Resources Investigation, Book 3, Chapter A8.

- U.S. Geological Survey. (1974). Limnological study of Lake Shastina, Siskiyou County, California (Water-Resources Investigations 19-74). Prepared in cooperation with the Siskiyou County Flood Control and Water Conservation District.
- U.S. Geological Survey. (1984). Gigantic debris avalanche of Pleistocene age from ancestral Mount Shasta.
- U.S. Geological Survey. (1986). Water resources data for the Mount Shasta area, Northern California.
- U.S. Geological Survey. (1988). A water-resources appraisal of the Mount Shasta area in northern California, 1985 (Water-Resources Investigations Report 87-4239).
- U.S. Geological Survey. (2004). Evaluation of methods used for estimating selected streamflow statistics, and flood frequency and magnitude, for small basins in North Coastal California Scientific Investigations Report 2004-5068.
- U.S. Geological Survey. (2008). *Documentation of a Conduit Flow Process for MODFLOW-2005*. Techniques and Methods, Book 6, Chapter A24.
- U.S. Geological Survey. (2008). *On mapping fracture networks onto continuum.* Water Resources Research, 44, W08435.
- U.S. Geological Survey. (2025). Shasta River stream gages: Shasta River near Yreka, CA Gage No. 11517500, and Shasta River near Montague, CA Gage No. 11517000. USGS Water Resources. Website.
- Van Kirk, R. W., & Naman, S. W. (2008). Relative effects of climate and water use on base-flow trends in the lower Klamath Basin. Journal of the American Water Resources Association, 44(4), 1035–1052.
- Vogel, D. A. (2003). Salmon rearing habitats in the main stem Klamath River.
- Watercourse Engineering, Inc. (2003). Shasta River flow and temperature modeling project. Prepared for the California Department of Fish and Game.
- Watercourse Engineering, Inc. (2005). *Lake Shastina limnology*. Prepared for the Information Center for the Environment, University of California, Davis, and the North Coast Regional Water Quality Control Board.
- Watercourse Engineering, Inc. (2009). *Lake Shastina water balance*. Prepared for the Montague Water Conservation District.
- Watercourse Engineering, Inc. (2010). *Montague main canal conveyance efficiency study*. Prepared for the Montague Water Conservation District.
- Watercourse Engineering, Inc. (2012). Response to restoration: Water temperature conditions in Big Springs Creek and surrounding waterways, 2009-2011.

  Prepared for The Nature Conservancy.

- Watercourse Engineering, Inc. (2012). Water quality sampling at Lake Shastina, Siskiyou County, California: 2011. Prepared for the Montague Water Conservation District.
- Watershed Sciences, LLC. (2004). *Aerial surveys using thermal infrared and color videography: Scott River and Shasta River sub-basins.* Prepared for the California North Coast Regional Water Quality Control Board and the University of California, Davis.
- Watershed Sciences, Inc. (2009). Airborne thermal infrared remote sensing: Upper Shasta River Basin, California. Prepared for Watercourse Engineering, Inc.
- Western Regional Climate Center. (1990). Yreka, California: 30-year daily temperature and precipitation summary (1961-1990).
- Western Regional Climate Center. (2000). Yreka, California: 30-year daily temperature and precipitation summary (1971-2000).
- Western Regional Climate Center. (2010). Yreka, California: 30-year daily temperature and precipitation summary (1981-2010).
- Western Regional Climate Center. (2016). Yreka, California: Climate monthly summary (1893-2016).
- Willis, A. D., Deas, M. L., Jeffres, C. A., Mount, J. F., Moyle, P. B., & Nichols, A. L. (2012). *Executive analysis of restoration actions in Big Springs Creek, March 2008–September 2011*. Prepared for the National Fish and Wildlife Foundation.
- Willis, A. D., Nichols, A. L., Jeffres, C. A., & Deas, M. L. (2013). Water resources management planning: Conceptual framework and case study of the Shasta Basin. Prepared for the National Fish and Wildlife Foundation.
- Willis, A. D. (2015). *California WaterBlog: A salmon success story during the California drought.* Published on January 20, 2015. University of California, Davis.
- Willis, A. D., Campbell, A. M., Fowler, A. C., Babcock, C. A., Howard, J. K., Deas, M. L., & Nichols, A. L. (2015). Instream flows: New tools to quantify water quality conditions for returning adult Chinook salmon. Journal of Water Resources Planning and Management, 141(11), 04015056.
- Willis, A. D. (2018). *California WaterBlog: Fish managers tasked with ranching?*Conservation wins. Published on August 12, 2018. University of California, Davis.
- Willis, A. D., Nichols, A. L., Holmes, E. J., Jeffres, C. A., Fowler, A. C., Babcock, C. A., & Deas, M. L. (2017). Seasonal aquatic macrophytes reduce water temperatures via a riverine canopy in a spring-fed stream. Freshwater Science, 36(3).
- Willis, A. D., & Lambert, D. (2017). Seasonal spring-flow production on Shasta Big Springs Ranch. University of California, Davis.

- Willis, A. D., & Holmes, E. (2019). Eye in the sky: Using UAV imagery of seasonal riverine canopy growth to model water temperature. Hydrology, 6(1), 6.
- Wilson, R., Galdi, G., & Stevens, N. (2022). *Influence of irrigation cut-off dates on forage production in Shasta Valley pastures: TNC deficit pasture irrigation project final report.* University of California Cooperative Extension.
- Wooldridge, J. W. (1931). *History of the Montague Water Conservation District*. In History of Sacramento Valley, California (Vol. 2, pp. 448-452).
- Yarnell, S., Willis, A., Lusardi, R., & Peek, R. (2022). *Applying the California Environmental Flows Framework to the Little Shasta River.*
- Zillig, K. W., Lusardi, R. A., & Fangue, N. A. (2018). *Variation in thermal eco-physiology among California salmonids: Implications for management.* University of California, Davis.

# II. Information Related to Economic Analysis

- ABC 30 Action News. (2014). With wells drying up, residents turn to water trucks. Published July 24, 2014.
- Agri-Pulse. (2023). Ranchers feel unfairly tied into drought emergency order. Published on April 5, 2023.
- California Department of Fish and Wildlife. (2023). *CA Salmon Revenue Estimates to NMFS (July 31, 2023)*. Submitted to the National Marine Fisheries Service.
- California Department of Tax and Fee Administration. (2013-2025). *California sales and use tax rates by county and city.* Website.
- California Energy Commission. (1990-2025). *California electricity statistics & data.*Website.
- California Department of Fish and Wildlife. (2024). Ocean Recreational and In-River Salmon Sport Fisheries in California Closed for Second Consecutive Season.
- California Department of Fish and Wildlife. (2024). Ocean salmon fishery information.
- CNBC. (2015). *California's four-year drought starts a 'water truck' boom.* Published April 8, 2015.
- Cole, S. A., & MedellÍn-Azuara, J. (2021). Siskiyou County agricultural economics analysis considering groundwater regulation. University of California, Merced.
- Daily Kos. (2024). It's official: *California salmon fishing closed again this year!* Published April 10, 2024.
- Department of Water Resources. (2014-2023). Statewide crop mapping. Website.
- ECONorthwest. (1999). Salmon and the economy: A handbook for understanding the issues in Washington and Oregon.
- Gresh, T., Lichatowich, J., & Schoonmaker, P. (2000). An estimation of historic and current levels of salmon production in the Northeast Pacific ecosystem: Evidence of a nutrient deficit in the freshwater systems of the Pacific Northwest. Fisheries, 25(1), 15-21.
- The Guardian. (2023). Ranchers' rebellion: The Californians battling state water rules in the American West. Published on September 22, 2022.
- Hackett, S. C., & Hansen, M. D. (2008). *Costs and economic characteristics of California salmon fisheries*. Humboldt State University. Prepared for the National Marine Fisheries Service.
- Headwaters Economics. (2016). Dam removal: Case studies on the fiscal, economic, social, and environmental benefits of dam removal.

- Howitt, R. E. (1995). *Positive mathematical programming*. American Journal of Agricultural Economics, 77(2), 329-342.
- Howitt, R. E., Medellín-Azuara, J., MacEwan, D., & Lund, J. R. (2012). *Calibrating disaggregate economic models of agricultural production and water management.*
- Kruse, S. A., & Scholz, A. J. (2006). *Preliminary economic assessment of dam removal: The Klamath River.* Retrieved from Siskiyou County Economic Assessment Final Report.
- Langdon-Pollock, J. (2004). West Coast marine fishing community descriptions. Prepared for the Pacific States Marine Fisheries Commission, Economic Fisheries Information Network.
- Lewis, D. J., Dundas, S. J., Kling, D. M., Lew, D. K., & Hacker, S. D. (2019). *The non-market benefits of early and partial gains in managing threatened salmon.* PLoS ONE, 14(8).
- M-Cubed. (2015). Economic impact analysis: Executive Order B-29-15. State of emergency due to severe drought conditions. Prepared for the State Water Resources Control Board.
- Meehan, M. A., Stokka, G., and Mostrom, M. (2021). *Livestock Water Requirements*. North Dakota State University.
- Michael, J. (2010). *Employment impacts of California salmon fishery closures in 2008 and 2009*. University of the Pacific, Business Forecasting Center.
- Moody's Investors Service. (2014). *California drought dries up agriculture, but tax revenues keep flowing.* Published May 20, 2024.
- National Marine Fisheries Service. (2008). *Habitat restoration cost references for salmon recovery planning.*
- National Marine Fisheries Service. (2022). Fisheries economics of the United States, 2022.
- National Public Radio (NPR). (2023). *California salmon fishing slated to shut down this year due to low stock.* Published on April 7, 2023.
- The New York Times. (2023). *California salmon stocks are crashing. A fishing ban looks certain.* Published April 3, 2023.
- Norman, K., Sepez, J., Lazrus, H., Milne, N., Package, C., Russell, S., Grant, K., Lewis, R. P., Primo, J., Springer, E., Styles, M., Tilt, B., & Vaccaro, I. (2007). Community profiles for West Coast and North Pacific fisheries—Washington, Oregon, California, and other U.S. states.

- Pacific Coast Federation of Fishermen's Associations. (2022). The value of salmon to the state of Oregon.
- Pacific Fishery Management Council. (2016). Klamath Dam Removal Overview Report for the Secretary of the Interior: An assessment of science and technical information.
- Pacific Fishery Management Council. (2021–2025). Review of Ocean Salmon Fisheries: Stock Assessment and Fishery Evaluation Document for the Pacific Coast Salmon Fishery Management Plan: Annual reports for 2020–2024.
- Pacific Fishery Management Council. (2025). *Pre-season Report I: Stock abundance analysis and environmental assessment for 2025 ocean salmon fishery regulations.*
- Pacific Rivers Council, Inc. (1992). The economic imperative of protecting riverine habitat in the Pacific Northwest.
- Pomeroy, C., Thomson, C. J., & Stevens, M. M. (2010). *California's North Coast fishing communities: Historical perspective and recent trends.* Final report to the California Coastal Conservancy. California Sea Grant Program, Scripps Institution of Oceanography, University of California.
- Schwarzenegger, A. (2006). Letter to U.S Secretary of Commerce requesting commercial fishery failure declaration (April 5, 2006). Office of the Governor, State of California.
- Shilling, F., Negrette, A., Biondini, L., & Cardenas, S. (2014). *California Tribes Fish-Use: Final Report.* University of California, Davis. Prepared for the State Water
  Resources Control Board and the U.S. Environmental Protection Agency.
- Siskiyou County. (2014-2022). Annual crop & livestock reports.
- Southwick Associates. (2012). Economic impact estimates associated with recreational and commercial salmon fishing in California.
- Spain, G. (1998). The cost of doing nothing: The economic burden of salmon declines in the Klamath Basin. Institute for Fisheries Resources.
- State of California. (2025). 2025-26 Governor's Budget: Trailer bill language tracking report.
- State Water Resources Control Board. (2018). Appendix G: Agricultural economic effects of Lower San Joaquin River flow alternatives.
- State Water Resources Control Board. (2023). Racial equity action plan 2023–2025.
- U.S. Fish & Wildlife Service. (2024). People of the salmon. Published on May 24, 2023.
- U.S. Department of Agriculture. (2025). California direct hay reports. Website.

- U.S. Department of Commerce. (1994-2024). *Various declarations and determinations regarding West Coast salmon fishery failures and fishery resource disasters.*
- University of California Cooperative Extension. (2001). Siskiyou Stockman: A report for Siskiyou livestock producers.
- University of California, Davis, & University of California Cooperative Extension. (2015). Sample costs to establish or reestablish and produce pasture using flood irrigation in the Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2015). Sample costs to produce pasture using flood irrigation in the Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2016). Sample costs to establish and produce orchardgrass hay in Shasta, Lassen, and Siskiyou Counties.
- University of California, Davis, & University of California Cooperative Extension. (2017). Sample costs for beef cattle: Cow-calf production in the Northern Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2017). Sample costs for beef cattle finished on grass in Northern Sacramento Valley.
- University of California, Davis, & University of California Cooperative Extension. (2020). Sample costs to establish and produce alfalfa hay in the Scott Valley.
- Yurok Tribe. (2016-2024). Requests for commercial fishery disaster declarations for the Yurok Klamath River commercial fishery. Submitted to the U.S. Secretary of Commerce.