Bryan Bei, E.I., M.S.
Water Resources Engineer,
DiNatale Water Consultants

Experience

Water Resource Engineer,
DiNatale Water Consultants, Inc.
2022-present

Mr. Bei is a water resources engineer with experience in water resources, drinking water treatment, construction inspection, and hydrodynamic fish habitat modeling. At DiNatale Water Consultants, Bryan primarily works on GIS mapping, reservoir water quality management, water supply system operations, and water accounting.

Mr. Bei has experience with various modeling and software programs including River2D, ArcGIS, QGIS, HEC-RAS, MODFLOW, EPANET, Excel, HEC-HMS, SMS, WMS, and the EPA WTP Model.

Education

M.S. Civil Engineering
University of Colorado at Boulder
2017

B.S. Environmental Engineering
University of Colorado at Boulder
2011

Mr. Bei received his B.S. degree in Environmental Engineering focused on Water Resources Management and Treatment from the University of Colorado at Boulder in 2011. From 2012 to 2015 he worked in California on fisheries monitoring and hydrodynamic modeling of salmonid habitat at the Sonoma County Water Agency. He completed his master's degree in Civil Engineering from the University of Colorado at Boulder in 2017. Since completing his master's degree, he has performed drinking water treatment plant operation for the City of Louisville in 2018 and construction inspection for the Colorado Department of Transportation from 2019-2022. He has been with DiNatale water as a full-time employee since January 2022.

Relevant Project Experience

Hydrodynamic Modeling of Fish Habitat. Mr. Bei performed hydrodynamic modeling of juvenile salmon and steelhead habitat in the Russian River while working for the Sonoma County Water Agency in Santa Rosa, CA. The modeling of habitat availability for juvenile salmonids at a range of flows was used to help evaluate the potential impact of reducing minimum instream flow requirements on habitat availability for these threatened species. Mr. Bei used River2D to perform the two-dimensional depth averaged modeling of river hydrodynamics and fish habitat in addition to several other programs including ArcGIS and HEC-RAS.

Drinking Water Treatment Plant Operations. Mr. Bei performed various tasks necessary to maintain the proper functioning of the Sid Copeland and Howard Berry water treatment plants in Louisville, CO. Bryan monitored raw water supplies, collected water samples and performed qualitative and quantitative water quality testing, adjusted chemical dosing, backwashed filters, and completed various other tasks associated with the daily operation of the two drinking water treatment plants.

Critical Culvert Modeling. Mr. Bei performed modeling of critical culverts that were in need of repair or replacement while working for the Colorado Department of Transportation. He used HEC-HMS, SMS, and WMS to model the basin area and characteristics of the watersheds feeding the culverts to help evaluate if the culverts were sized adequately for the basins they were serving and if it might be feasible to consider repair methods that would further constrict the size of the culverts.

Water Resources Fieldwork. Mr. Bei has performed a considerable amount of fieldwork related to water resources, including water quality testing, monitoring groundwater levels, measuring streamflow, and fisheries monitoring.

GIS Applications. Experienced in the use of GIS applications related to water resources, including use of ArcGIS and QGIS platforms.