



Legislation Text

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TO: Technical Advisory Group for the Napa County Groundwater Sustainability Agency
FROM: Brian Bordona - Interim Director of Planning, Building and Environmental Services
REPORT BY: Jamison Crosby, Natural Resources Conservation Manager
SUBJECT: Update on Stream Watch Community Science Streamflow Monitoring Program

RECOMMENDATION

Provide a presentation to the Technical Advisory Group (TAG) on the Stream Watch network, existing data and future planned sites to better inform data gaps in dry and wet stream conditions across the Napa Valley River Watershed.

EXECUTIVE SUMMARY

Paul Blank, Environmental Scientist at Napa RCD, will make a presentation on the Stream Watch Community Science Streamflow Monitoring Program. Staff and the technical team are working on the Integrated Surface Water (ISW) and Groundwater Dependent Ecosystems (GDEs) Workplan. It is envisioned that Stream Watch will play an important role, when combined with other data, to help better understand baseflows on GDEs.

Procedure:

Staff introduces the item.

Questions and answers with the TAG.

Public comments.

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

The Stream Watch program began in 2017 to help fill critical data gaps between limited stream gage data across the Napa Valley River Watershed and the understanding between groundwater and surface water connections.

Relying on volunteers to make observations, the program requires participants to log observations at each Stream Watch site tagging the conditions as ‘dry’, ‘isolated pools’, or ‘flowing’. Each site records volunteer entries at least once per week or more frequently depending on the site. The original 10 sites were paired with dedicated groundwater monitoring wells to better understand the relationship between surface water conditions and groundwater levels adjacent to monitoring sites. Since 2017, the Stream Watch program has grown to 42 sites (39 active stations, 3 retired stations) covering approximately 50 miles of stream channel. Retired sites were discontinued because conditions remained static over their record of observations. Twenty additional sites are proposed and include volunteer and camera/sensor sites (9 volunteer and 11 camera/sensor).

Stream observations can be correlated with precipitation, or other stream stage/flow monitoring sites in the Subbasin, to provide greater understanding of streamflow conditions as they change throughout the year over a broad area. Knowledge of when wetted channels appear and recede is important in understanding baseflow influences on GDEs, including fish and other aquatic species. This data is invaluable for understanding stream conditions throughout the year and will be used to inform and develop the ISW and GDEs Workplan and will also be used during further updates to the Napa Valley Integrated Hydrologic Model later this year.

SUPPORTING DOCUMENTS

- A. Presentation: Paul Blank, Environmental Scientist with Napa RCD Stream Watch Update