

UC Santa Barbara

Data Descriptions

Title

Nutrient concentrations of the Devereux Slough, 2018–2022 (nitrogen, phosphorus and ammonium) data description

Permalink

<https://escholarship.org/uc/item/50c5h037>

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Publication Date

2024-05-07

Data Availability

The data associated with this publication are available at:

<https://datadryad.org/stash/dataset/doi:10.25349/D9VG9J>

**Nutrient concentrations of the Devereux Slough,
2018–2022 (nitrogen, phosphorus and
ammonium) data description**



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This document describes the content, purpose, methods and uses of the nutrient concentration data set for the UC Santa Barbara North Campus Open Space (NCOS) Restoration Project.

TITLE: Nutrient concentrations of the Devereux Slough, 2018–2022 (nitrogen, phosphorus and ammonium) data description

CONTENT:

- Nitrite- nitrate concentrations
- Phosphate concentrations
- Ammonium concentrations

DATE(S): Initiated in 2018, full storm sampling completed until 2021. Occasional samples are continually being taken.

STATUS: Complete

PURPOSE: Nutrient concentrations have been taken as one way to assess the value of the newly established wetland and understand the impact that storms have on the system.

DATA LOCATION & ACCESS: Nutrient concentrations as well as sampling locations can be download at <https://datadryad.org/stash/dataset/doi:10.25349/D9VG9J>

REFERENCED IN:

- Year 1 Monitoring Report (escholarship.org/uc/item/0zc3n78c)
- Year 2 Monitoring Report (escholarship.org/uc/item/5sj929vh)
- Year 3 Monitoring Report (escholarship.org/uc/item/7bq618m8)
- Year 4 Monitoring Report (escholarship.org/uc/item/4mc6h09z)
- Year 5 Monitoring Report (escholarship.org/uc/item/4pb052gr)

METHODS: Nutrient sampling was targeted at storm events. Automated ISCO samplers were set up at 3 sites: phelps bridge, venoco bridge and whittier storm drain to take automated nutrient concentration samples. Grab samples were taken at devereux creek and grab samples were also taken periodically at our 3 established sites to compare the ISCO and grab methods.

The ISCO's was set to take hourly samples for the duration of a storm and samples were analyzed between the rise and fall of the hydrograph. The ISCO's were filled with ice for the 24 hour deployment to preserve the samples. Grab samples were taken from devereux creek as often as possible. Samples were transferred to a

refrigerated area and filtered within 48 hours of the first sample. Samples were then cataloged and sent to the Marine Science Institute Analytic Lab for nutrient analysis.