

Go Code Colorado 2020 Idea Submission

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Idea Title: Water Provider Dataset Integration and Visualization

Issue Identification

The Colorado Information Marketplace provides access to water providers as special districts and metropolitan districts from Department of Local Affairs (DOLA). Municipalities also are often water providers as utilities and multiple utilities and water districts may serve one community. The DOLA datasets are incomplete in that the districts datasets and utilities boundaries are not included. It is necessary to access boundaries from other open data websites or directly from water provider entities. This makes it difficult to understand who water providers are in any location.

Data

The project will involve integrating water provider boundaries from DOLA and water provider entities, as well as a statewide water provider point dataset from the Open Water Foundation.

Potential Impact

There are over 500 water providers in the State serving over 200 communities and many organizations and individuals try to understand what water providers are involved in their locale. There are also many projects and studies that could benefit from easy access to an integrated water provider boundary dataset.

Innovation

This project will demonstrate the value of a community dataset that is data infrastructure for the public and entities that work with water provider data. The Open Water Foundation, as a statewide nonprofit that focuses on open source software and open data solutions, is in a unique position to help integrate and sustain such a dataset, including collaborating with government entities.

Presentation

See the video of a recorded PowerPoint presentation: https://youtu.be/bqsFEpYe_K8

Summary

The idea is to enhance the Open Water Foundation's open source GeoProcessor and InfoMapper software and Poudre Basin Information Website (see: <http://poudre.openwaterfoundation.org/latest/#/map/entities-water-providers>) to create and provide public access to a statewide map layer of water supplier service area boundaries. Automated processing workflows will be implemented to download and merge datasets to provide a single layer that can be used in visualizations and analysis. Attribution and links to the original datasets will be provided. The exercise will also put in place a workflow that can be rerun when component datasets are updated.