West Jordan urban gradient, Great Basin (IRON, domain 15)

Location: **West Jordan urban gradient**, Great Basin (IRON, domain 15), WJ_UT_IRON
Contact person: Diane Pataki, 949-824-9411, dpataki@uci.edu
Webpage: http:// neon-iron.org

Location within domain:

Latitude: 40.60
Longitude: -111.98
Ownership: City and private
Access: open

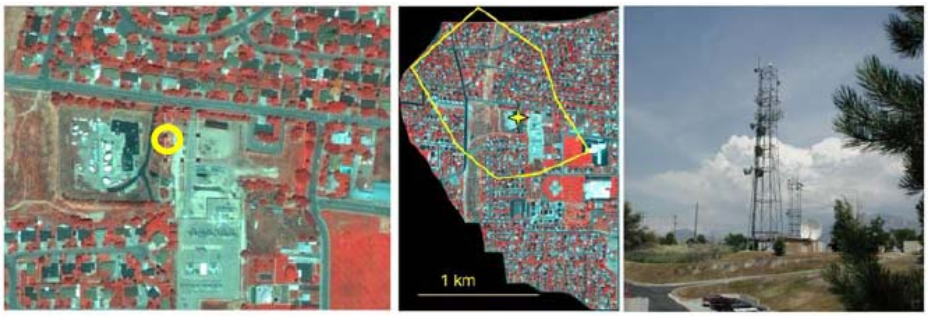
Aquatic features: river

Contributions to national gradient: urbanization, land cover, invasives, infectious disease

History: West Jordan is the central point of an expanding network of urban ecosystem sites within the Salt Lake Valley, UT that began in 2001, focusing on water, carbon, and energy relationships. There is an extensive network of state and federal monitoring of air quality, meteorological conditions including atmospheric soundings, and water quality studies.

Key characteristics: The region is characterized by a very rapidly urbanizing landscape, where sagebrush was first converted to dryland or irrigated agriculture, and then onto low-density urban housing. Maturing cities along this gradient are characterized by increasing housing densities.

Existing infrastructure: Weather stations (Http://met.utah.edu), CO2 and CO sensors (http://co2.utah.edu), ecosystem and monitoring equipment associated with ongoing analyses related to energy use, water use and choices, C and N cycles, and human health in urban ecosystems (Urban Systems and Human Built Environments Center, University of Utah) (http://slvairshed.utah.edu), have been in place since 2001. There are two eddy covariance systems associated with these studies and an extensive meteorological and sounding network (Mesowest). There are SNOTEL and USGS online gauging stations throughout the region.



One example of current eddy covariance instrumentation and its footprint in the Salt Lake Valley, Utah.

Facilities: There are extensive laboratories and dormitory space located at the University of Utah in the Salt Lake Valley.