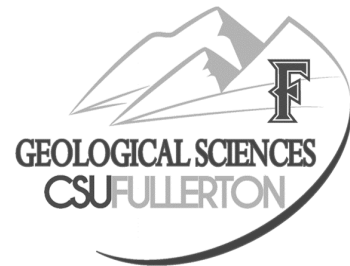


ESM 121

Water Science
and Management

Basin Overview



Samuel Sandoval Solis, PhD
Freddi Brusckke, Ph.D

Introduction



If you have ever purchased a package of Driscoll[®]; strawberries or tasted a sip of Martinelli's cider[®], you have enjoyed a product of the Pajaro Valley! The Pajaro River Valley is located in coastal Central California, draining from the Santa Cruz, Diablo, and Gabilan Mountains into Monterey Bay. Watsonville, the primary urban area in the valley, is considered the strawberry capital of the world¹, producing [130 thousand tons of strawberries](#) a year.



¹ However, a number of US cities claim [this title](#).

CHARACTERIZE THE PAJARO RIVER VALLEY

Throughout this course you will be exploring the content and analysis necessary to develop a plan for allocating and managing the water resources in the Pajaro River Valley. The first portion of this analysis is introductory information about the area; this will become the first section of a Basin Management Plan (BMP).

The general characterization of the river valley should include information about the geography, demographics, hydrology, geology, climate, industry, and ecology--all necessary to understand the area. In this first activity, you will explore resources that describe this valley and write a summary characterization to introduce the area.

The results for this activity

You will write a summary the important characteristics of the Pajaro River Valley and submit it to your instructor. The report should contain four sections of information: Physiography, Demographics, Water Resources, and Regulatory Management. Your report should include maps and graphics where appropriate.

Resources

You will find the following sources very helpful:

- Previous Pajaro Valley Basin Management Plans: [2012](#) and [2014](#) (PVWMA)
- [Story map of Pajaro Valley](#) (PVWMA)
- [Purpose of the PVWMA](#) (PVWMA)
- [Maps from PVWMA](#) (PVWMA)
- [Pajaro Compass Webmap](#)

A note about originality

Although it may be very tempting to "cut and paste" language from a website into your own document, this practice is both a violation of academic integrity standards (plagiarism) and serves no useful purpose for learning. For this report, you are asked to collect information from other sources and then describe the information in your own words. The ability to synthesize and paraphrase information demonstrates an understanding of your topic as well as the objectives of your project.

All universities have plagiarism policies; if you are unsure about the policies at your school, check with your instructor. In general:

1. Direct use of words someone else has written is plagiarism
2. Copying someone else's words and then making a few changes in also plagiarism (jigsaw)
3. Once you paraphrase and combine information from multiple sources, you must cite your references for any information that is not common knowledge
4. At all schools, plagiarism has direct consequences for students which may range from a zero on an assignment to failure in a course (or worse). Check with your instructor to be clear about their policies.

This [infographic from Turnitin](#) is a good quick summary of types of plagiarism.

Instructions

To be turned in: Examine the resources provided above for information about the Pajaro River Valley and write a description of the watershed, focusing on the important information for assessing water resources and water allocation. You will characterize the area in four primary ways, specified below. A complete report will address all of the topics requested in these instructions. Each of the four sections should be labeled with the appropriate subheading:

- **Physiography:** Describe the climate (temperature ranges, climate zone, precipitation, evapotranspiration), size of and land use in the watershed, topography and geology, and soil types.
- **Natural water resources:** Describe the natural flow regimes of the Pajaro River and aquifer(s) present in the area
- **Demographics:** Describe the primary economic activities in the valley, the cities and towns (and their populations), income levels and other demographic information of the people in the Pajaro Valley
- **Regulatory agency and framework:** Briefly describe Pajaro Valley Water management Agency (PVWMA) and the regulatory context of the Basin Management Plan (BMP)

Each section should contain maps and/or figures to help illustrate your information. All maps/figures should have captions describing their content and attributing the source of the image.

References:

Man holding

strawberries--[https://commons.wikimedia.org/wiki/File:Selling_strawberries_\(7308408886\)_2.jpg](https://commons.wikimedia.org/wiki/File:Selling_strawberries_(7308408886)_2.jpg)

Pajaro River Watershed Map PVWMA