San José State University
Urban and Regional Planning Department
URBP 260: Topics in Environmental Planning

Spring 2013

Water and Land Use in Silicon Valley
In an Era of Accelerating Climate Change

Instructor: Susan Moffat
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Email: Moffat.susan@gmail.com
Office hours: Tuesdays 3:00 p.m. to 4:00 p.m.
Class days/time: Tuesdays 4:30 p.m. to 7 p.m.
Classroom: Sweeney Hall 444
Prerequisites: None
Units: 4

Course Catalog Description:
In-depth examination of selected topics specifically related to environmental planning. Course may be repeated for credit when topic changes.

Course Description and Course Learning Objectives:
This course will examine the flow of water in the Santa Clara Valley watershed from hilltop to bay, from rainfall to groundwater, and from the statewide water supply system to the tap. Students will learn about water supply, wastewater treatment, and managing water in the landscape (drainage, flood control, and habitat management). The role of water in the geography of cities and in urban design will be briefly examined. Students will learn about strategies used by planners, designers, and restoration managers for adapting to the rise of water caused by climate change. Field trips will provide an opportunity for learning about water supply facilities, flood control, and restoration sites, and guest lecturers will bring expertise on civil engineering, restoration design, and regional water supply.

Upon successful completion of the course, students will be able to:

1. Orally explain the basic outlines of the California water supply system and key water dilemmas in the state to a layperson
2. Explain the connection between water and energy consumption and generation
3. Describe the main watersheds and water management challenges in the Santa Clara Valley
4. Begin to communicate in an informed way with engineering and planning professionals and citizens about flood control and sustainable watershed planning
5. Describe the system of water quality regulation and key agencies in California and explain methods of reducing non-point source water pollution
6. Describe the system of wastewater treatment and recycling in Santa Clara County
7. Explain several adaptive approaches to sea-level rise and climate change for both habitat restoration and urban development
8. Identify the information a stakeholder group needs to make rational decisions, and make a plan to gather and convey that information in an effective way
9. Be able to use effective storytelling methods and be able to create communications materials that combine images, text, and numbers in a manner appropriate to the audience.

Planning Accreditation Board (PAB) Knowledge Components

This course partially covers the following:

1. General planning knowledge: The comprehension, representation, and use of ideas and information in the planning field, including appropriate perspectives from history, social science, and the design professions.
   a) Purpose and Meaning of Planning: appreciation of why planning is undertaken by communities, cities, regions, and nations, and the impact planning is expected to have.
   c) Planning Law: appreciation of the legal and institutional contexts within which planning occurs.
   d) Human Settlements and History of Planning: understanding of the growth and development of places over time and across space.
   e) The Future: understanding of the relationships between past, present, and future in planning domains, as well as the potential for methods of design, analysis, and intervention to influence the future.
   f) Global Dimensions of Planning: appreciation of interactions, flows of people and materials, cultures, and differing approaches to planning across world regions.

2. Planning skills: The use and application of knowledge to perform specific tasks required in the practice of planning.
   b) Written, Oral and Graphic Communication: ability to prepare clear, accurate and compelling text, graphics and maps for use in documents and presentations.
   c) Quantitative and Qualitative Methods: data collection, analysis and modeling tools for forecasting, policy analysis, and design of projects and plans.
   d) Plan Creation and Implementation: integrative tools useful for sound plan formulation, adoption, and implementation and enforcement.
   f) Leadership: tools for attention, formation, strategic decision-making, team building, and organizational/community motivation.

3. Values and ethics: Values inform ethical and normative principles used to guide planning in a democratic society. The program shall appropriately incorporate issues of diversity and social justice into all required courses of the curriculum, including:
   b) Governance and Participation: appreciation of the roles of officials, stakeholders, and community members in planned change.
   c) Sustainability and Environmental Quality: appreciation of natural resource and pollution control factors in planning, and understanding of how to create sustainable futures.
   d) Growth and Development: appreciation of economic, social, and cultural factors in urban and regional growth and change.
   e) Social Justice: appreciation of equity concerns in planning.
A complete list of the PAB Knowledge Components can be found at http://www.sjsu.edu/urbanplanning/courses/pabknowledge.html.

Required Course Texts to Purchase:

Available for order on-line from Solano Press or Amazon.com. Chapter 1 is available on electronic reserve at the library.

Available for order on-line from Amazon.com. Hard copy on reserve at the library.

Optional (not required to purchase)


Course Assignments and Grading Policy:

Your grade for the course will be based on the following assignments and other activities:

<table>
<thead>
<tr>
<th>Assignments and Participation</th>
<th>Percent of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Water Day Project</td>
<td>10%</td>
</tr>
<tr>
<td>Water Basics PowerPoint</td>
<td>20%</td>
</tr>
<tr>
<td>Presentation and Fact Sheets</td>
<td></td>
</tr>
<tr>
<td>San Francisquito Creek Project and Presentation (engagement unit activity)</td>
<td>25%</td>
</tr>
<tr>
<td>Water Wiki/Blog</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes, on-line discussion, and participation</td>
<td>25%</td>
</tr>
<tr>
<td>Culminating Activity: Reflection and Action Plan</td>
<td>5%</td>
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</tbody>
</table>
Assignments will be explained in detail on Canvas and in class. Here is a brief summary:

World Water Day Project: Outreach materials explaining water issues in association with on-campus awards ceremony to recognize Silicon Valley Water Conservation Award winners.

Water Basics PowerPoint Presentation and Fact Sheets: Presentation summarizing key water management concepts learned in the course, to be presented to a general audience such as a City Council or Rotary Club.

San Francisquito Creek Project and Presentation: Analysis of alternatives for flood control on urban creek. This is the engagement unit activity designed to integrate theory and practice, and to observe and participate in real-life planning processes.

Water Wiki/Blog: Shared knowledge base and reflections on water issues.

Quizzes, on-line discussions, and class participation: Weekly homework and work in class.

Culminating Activity: Reflection and Action Plan: individual and group reflection on processes of knowledge-building and deliberation used in the class, and personal action plan for integrating water issues into future professional work.

**Calculation of Final Course Letter Grade**

I will calculate the final letter grade for the course by weighting the grade for each assignment according to the percentages in the table above. To do this, I first convert the letter grade for each assignment to a number using a 4-point scale (A = 4.0, A- = 3.67, B+ = 3.33, B = 3, B- = 2.67, C+ = 2.33, C = 2.0, C- = 1.67, D = 1, and F = 0). I then use these numbers and the weights for each assignment to calculate a final, numerical grade for the course based on a 4-point scale. That number is converted back to a letter grade (A = 3.85+, A- = 3.50 – 2.84, B+ = 3.17 – 3.49, B = 2.85 – 3.16, B- = 2.50 – 2.84, C+ = 2.17 – 2.49, C = 1.85 – 2.16, C- = 1.50 – 1.84, D+ = 1.17 – 1.40, D = 0.85 – 1.16, F = 0 – 0.84).

**Other Grading and Assignment Issues**

Quizzes will consist of on-line, primarily multiple choice questions. On-line discussions are an integral part of the course and responses to prompts are required. Grading of on-line discussions will be based on the quality of questions and comments shared—not quantity. The in-class participation grade will be determined based on the student’s contribution to learning by the group. High-quality participation is represented by thorough preparation, respectful listening, thoughtful comments, and proactive thinking about how small groups and the class as a whole can work together to facilitate the best possible learning experience.

Quizzes and on-line discussions will be available on Canvas during specified periods, beginning the week before they are due. If they are not completed during the specified times, they will receive a score of zero. There are no makeups. If you have travel plans or circumstances that will make completing certain assignments impossible in the designated time period, please consult with me by email or phone at least two weeks before the due date so that I can make the materials available in
advance of the regular date that the quiz becomes available so you can complete the work by the
regular due date.

For assignments other than quizzes and on-line discussions, late submissions will not be accepted
unless the instructor is informed by email at least 24 hours in advance of the due date and time. An
assignment submitted within 24 hours after the due time will be lowered by one letter grade. No
assignments will be accepted after 24 hours. Computers crash, files won’t print, flat tires happen on
a regular basis. Please build time for these circumstances into your project management as they will
not be accepted as reasons to avoid this penalty. In particular, remember to test-print documents
created in Adobe CS and upload Web site material early in project development process to identify
technical glitches, rather than waiting to the last minute to print or upload the final product.

Course Workload

Success in this course is based on the expectation that students will spend, for each unit of credit, a
minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with
1 of the hours used for lecture) for instruction or preparation/studying or course related activities
including but not limited to internships, labs, clinical practica. Other course structures will have
equivalent workload expectations as described in the syllabus.

Because this is a four-unit class, you can expect to spend a minimum of nine hours per week in
addition to time spent in class and on scheduled tutorials or activities. Special projects or
assignments may require additional work for the course. Careful time management will help you
keep up with readings and assignments and enable you to be successful in all of your courses. For
this class, you will have to undertake additional activities outside the class hours such as site visits,
group and independent research, film viewings, and field trips. Details on how to complete these
activities will be provided in class and on Canvas.

Academic Integrity Statement, Plagiarism, and Citing Sources Properly

SJSU's Policy on Academic Integrity states: “Your own commitment to learning, as evidenced by
your enrollment at San Jose State University, and the University's Academic Integrity Policy requires
you to be honest in all your academic course work. Faculty members are required to report all
infractions to the Office of Student Conduct and Ethical Development” (Academic Senate Policy
S07-2). The policy on academic integrity can be found at http://www.sjsu.edu/senate/S07-2.htm.

Plagiarism is the use of someone else's language, images, data, or ideas without proper attribution. It
is a very serious offense both in the university and in your professional work. In essence, plagiarism
is both theft and lying: you have stolen someone else's ideas, and then lied by implying that they are
your own.

Plagiarism will lead to grade penalties and a record filed with the Office of Student Conduct and Ethical Development. In severe cases, students may also fail the course or even be expelled from the university.

If you are unsure what constitutes plagiarism, it is your responsibility to make sure you clarify the issues before you hand in draft or final work.
Learning when to cite a source and when not to is an art, not a science. However, here are some common examples of plagiarism that you should be careful to avoid:

- Using a sentence (or even a part of a sentence) that someone else wrote without identifying the language as a quote by putting the text in quote marks and referencing the source.
- Paraphrasing somebody else's theory or idea without referencing the source.
- Using a picture or table from a webpage or book without reference the source.
- Using data some other person or organization has collected without referencing the source.

The University of Indiana has developed a very helpful website with concrete examples about proper paraphrasing and quotation. See in particular the following pages:

- Overview of plagiarism at www.indiana.edu/~istd/overview.html
- Examples of plagiarism at www.indiana.edu/~istd/examples.html
- Plagiarism quiz at www.indiana.edu/~istd/test.html

If you still have questions, feel free to talk to me personally. There is nothing wrong with asking for help, whereas even unintentional plagiarism is a serious offense.

**Citation style**

It is important to properly cite any references you use in your assignments. The Department of Urban and Regional Planning uses Kate Turabian’s *A Manual for Writers of Research Papers, Theses, and Dissertations*, 7th edition (University of Chicago Press, 2007, ISBN-10: 0-226-82336-9). Copies are available in the SJSU King Library. Additionally, the book is relatively inexpensive, and you may wish to purchase a copy. An on-line quick guide to Turabian is available at http://www.press.uchicago.edu/books/turabian/turabian_citationguide.html. Please note that Turabian’s book describes two systems for referencing materials: (1) “notes” (footnotes or endnotes), plus a corresponding bibliography, and (2) in-text parenthetical references, plus a corresponding reference list. In this class, students should use in-text parenthetical references, plus a corresponding reference list.

**Accommodation for Disabilities**

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center) to establish a record of their disability.

You can find information about the services SJSU offers to accommodate students with disabilities at the Disability Resource Center website at www.drc.sjsu.edu.

**Consent for Recording of Class and Public Sharing of Instructor Material**

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any
Library Liaison
The SJSU Library Liaison for the Urban and Regional Planning Department is Ms. Toby Matoush. If you have questions, you can contact her at toby.matoush@sjsu.edu or 408-808-2096.

SJSU Writing Center
The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center website is located at http://www.sjsu.edu/writingcenter.

Clear writing is an essential tool of the planner. I encourage you to show your work to classmates and to non-planners (friends, roommates, colleagues) to identify and correct unclear or wordy passages, eliminate jargon, and improve organization. Of course, the work must remain your own. But having a fresh set of eyes point out tangled sentences or ask the sort of question that reveals that you have not succeeded in conveying your central point can be very useful. Strunk and White’s Elements of Style is an excellent guide.

Classroom Protocol
Class will start promptly at 4:30 p.m. We will have ten minutes of optional socializing and snack sharing from 4:20 to 4:30, and class activities will start on the dot at 4:30. If you will have trouble arriving by 4:30 on a regular basis, please let me know. Please turn off cell phones before arriving at class. Please refrain from texting or checking messages during class. Laptops should be used only for notetaking during class. Surfing the Web, checking email or Facebook is distracting to classmates and disrespectful to guest speakers and to fellow students, so please refrain from these activities during class.

Disclaimer
Because the schedule of guest speakers and field trips is subject to change, there may be changes to this syllabus. Also, because a central theme of the class is the process of group knowledge-building, we may adjust activities and schedules to maximize opportunities for learning. Any changes will be discussed in class with as much notice as possible and will be noted on Canvas.
# URPB 260

**TOPICS IN ENVIRONMENTAL PLANNING: WATER AND LAND USE**  
**SPRING 2013**

## COURSE SCHEDULE

Depending on the availability of speakers and of access to field trip sites, this schedule is subject to change. Please refer to the schedule on Canvas, which will be regularly updated. More readings will be added and they will be listed in Canvas. Please rely on Canvas rather than this syllabus for up-to-date information. More detailed information on readings, including Web sources, will be provided in the Reading Guide available on Canvas.

**IMPORTANT:** Readings should be completed **BEFORE** the date they are listed.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignments due</th>
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<tbody>
<tr>
<td>1/29</td>
<td>Introduction</td>
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<tr>
<td>2/5</td>
<td>California Water Supply Speaker: Tom Gohring</td>
<td>Loux Ch 1, p. 69-70, ch 8 Carle, Ch. 1-3, p. 187-191</td>
<td>Reading quiz 1 Questions for Gohring Water system sketch Sketch practice Sketch presentation</td>
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<tr>
<td>2/9 (Sat.)</td>
<td>Field Trip: San Francisquito Creek</td>
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<tr>
<td>2/12</td>
<td>Water Supply and Ecosystems Speakers: John Cain and Christina Swanson</td>
<td>Dunne and Leopold Ch 14, p. 493-501, Ch 16 590-651 “Dust to Bust”</td>
<td>Reading quiz 2 Questions for Cain/Swanson Citizen fact sheet</td>
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<tr>
<td>2/19</td>
<td>Local Water Supply, Flood Control, and Watershed Management Speaker: Jim Fiedler</td>
<td>SCVWD Web Site Dunne and Leopold, Ch 7 Loux Ch 5 Optional: Reisner, Ch. 2</td>
<td>Reading quiz 3 Questions for Fiedler Watershed sketch Sketch practice Sketch presentation Citizen fact sheet</td>
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<tr>
<td>2/26</td>
<td>Water in the City Speaker: Laurel Prevetti</td>
<td>Johnson and Loux, Ch 3 <strong>San Jose General Plan</strong></td>
<td>Reading quiz 4 Questions for Prevetti Citizen fact sheet</td>
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<tr>
<td>3/5</td>
<td>Field Trip: 2005 Corps Feasibility Study</td>
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<td>Reading quiz 5</td>
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<tr>
<td>Date</td>
<td>Event Description</td>
<td>Location/Details</td>
<td>Notes</td>
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<td>3/12</td>
<td>International Perspectives</td>
<td>Speaker: Jeff Loux</td>
<td>Reading quiz 6</td>
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<td></td>
<td><strong>Border 2020</strong></td>
<td></td>
<td>Questions for Loux Citizen Fact Sheet</td>
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<tr>
<td>3/19</td>
<td>World Water Day Project Review</td>
<td>TBD</td>
<td>Water communication project</td>
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<tr>
<td>Date TBD</td>
<td><strong>Field Trip:</strong> wastewater treatment plant</td>
<td>March 2012 Draft Master Plan</td>
<td>Reading quiz 7</td>
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<td></td>
<td>Speaker: Silwal, Urban Wastewater</td>
<td></td>
<td>Questions for field trip Citizen Fact Sheet</td>
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<tr>
<td>4/2</td>
<td>Water Quality</td>
<td>Speaker: Jill Bicknell</td>
<td>Reading quiz 8</td>
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<td></td>
<td><strong>Johnson and Loux, Ch7</strong></td>
<td></td>
<td>Questions for Bicknell Citizen Fact Sheet</td>
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<tr>
<td>4/9</td>
<td>Sea Level Rise/Climate Change</td>
<td>Speaker: Brad McCrea</td>
<td>Reading quiz 9</td>
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<td></td>
<td><strong>Climate Change Bay Plan Amendment ART Vulnerability and Risk Assessment Report</strong></td>
<td></td>
<td>Questions for McCrea Citizen Fact Sheet</td>
</tr>
<tr>
<td>4/16</td>
<td><strong>Field Trip:</strong> Wetland Restoration</td>
<td><strong>Final EIS Executive Summary</strong></td>
<td>Reading quiz 10</td>
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<td></td>
<td>Speaker: John Bourgeois</td>
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<td>Questions for Bourgeois Citizen Fact Sheet</td>
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<tr>
<td>4/23</td>
<td>San Francisquito Project</td>
<td>TBD</td>
<td>Water Basics PowerPoint</td>
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<tr>
<td>4/30</td>
<td>San Francisquito Project</td>
<td>TBD</td>
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<tr>
<td>5/7</td>
<td>San Francisquito Project</td>
<td>TBD</td>
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<tr>
<td>5/21</td>
<td>Culminating Activity 4:15-7:30 p.m.</td>
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