Managing water resources involves ensuring reliable quantities of water of acceptable quality, while simultaneously maintaining or restoring the ecological functioning of water bodies that supply these amenities (along with other socially important values – aesthetic, recreational, and biological). Beyond its direct importance as a resource, water is a pervasive issue in many environmental problems.

These environmental problems require new levels of understanding to be developed through non-traditional approaches involving professionals knowledgeable about the atmosphere, surface and ground water, rivers, and the processes that generate, transport, store and/or transform chemicals and aquatics that society is concerned about. Bren School graduates with a specialization in Water Resources Management (WRM) will be able to participate in grand water-related issues of the type referred to above either by providing the critical new scientific knowledge and analysis, or by guiding policy development or management decisions concerning the problems that society finds very difficult to solve.

This specialization is directed towards students who plan to address issues related to water quantity and quality. Water resources issues span many scales, from local drinking water or surf zone quality, to large-scale watershed management for water supply, flood and erosion control, protection of aquatic systems for wildlife and other intended uses.

In addition to a strong background in hydrologic processes, a professional needs to understand the biogeochemical processes in the watershed and receiving water bodies, the economics of natural resources, as well as the myriad policies, laws and regulations that pertain to water resources and their stewardship. Given the spatial nature of these processes, a WRM professional needs to be familiar with GIS tools, remote sensing, spatial data analysis and modeling. We provide examples of water resources management programs of study, although you are welcome to create your own based on our recommendations.
JOB PLACEMENT AND INTERNSHIP PLACEMENT STATISTICS:
WATER RESOURCES MANAGEMENT (WRM)

Salaries for Initial Job Placement

<table>
<thead>
<tr>
<th>MESM Class</th>
<th>Minimum Salary</th>
<th>Average Salary</th>
<th>Maximum Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of 2012</td>
<td>$42,000</td>
<td>$59,041</td>
<td>$75,125</td>
</tr>
<tr>
<td>Class of 2011</td>
<td>$40,000</td>
<td>$49,500</td>
<td>$60,000</td>
</tr>
<tr>
<td>Class of 2010</td>
<td>$40,000</td>
<td>$50,234</td>
<td>$63,000</td>
</tr>
</tbody>
</table>

The large majority of WRM students from the past 3 graduated classes indicated that they were satisfied with the salary and benefits package that accompanied their initial job placements.

Satisfaction with Initial Job Placement

Most (60%) of the MESM Class of 2011 graduates who specialized in WRM indicated their initial job placement as being either "ideal" or "close to ideal," according to responses to the Career Development Initial Job Placement Survey.

Initial Job Placement Sectors

According to the information provided by survey respondents, 25% of students from the MESM Class of 2012 who specialized in WRM found jobs in the government sector, with just as many respondents being placed in the non-profit, research/education and consulting sectors.

Internship Placement—MESM 2014

Many students specializing in WRM from the MESM Class of 2014 landed internships with non-profit and government organizations. A third as many found internships working in the research/education and corporate sectors. Almost all (96%) WRM interns received compensation for their internships, with most internships lasting 10-12 weeks at full-time.

Sample Internship Placement Organizations for WRM students (MESM 2014 and MESM 2013)

- California Coastal Commission—Technical Services Biology Division in Ventura, CA (Government)
- Dudek—Hydrogeology Division in Santa Barbara, CA (Consulting)
- Groundswell Technologies, Inc. in Santa Barbara, CA (Corporate)
- Karl Storz Imaging in Goleta, CA (Corporate)
- Landcare Research in Palmerston North, New Zealand (Research/Education)
- Los Alamos National Laboratory—Waste and Environmental Services, Environmental Data Analysis in Los Alamos, NM (Government)
- Los Padres ForestWatch in Santa Barbara, CA (Non-Profit)
- New Mexico Interstate Stream Commission in Santa Fe, NM (Government)
- OC Watersheds – Dry Weather Monitoring Program in Orange, CA (Government)
- Olazul in La Paz, Mexico (Non-Profit)
- Pacific Gas & Electric (PG&E) in San Ramon, CA (Corporate)
- Project WET in Bozeman, MT (Non-Profit)
- Santa Ynez River Water Conservation District in Santa Ynez, CA (Government)
- State and Federal Contractors Water Agency in Sacramento, CA (Government)
- Surfrider Foundation in Ventura, CA (Non-Profit)
- Tejon Ranch Conservancy in Lebec, CA (Non-Profit)
- TOR Environmental in San Clemente, CA (Consulting)
- UCSB – Cheadle Center for Biodiversity and Ecological Restoration in Santa Barbara, CA (Research/Education)
- UCSB – Purchasing Department in Santa Barbara, CA (Research Education)
- WestWater Research in Boise, ID (Corporate)
- Woodard & Curran in Dedham, MA (Consulting)
- Wyoming State Engineers Office in Cheyenne, WY (Government)

http://www.bren.ucsb.edu/academics/mesm_specialization/water_res_mgt.htm