

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
AES-5D	Physical Plant	Continue Site Stewardship Program.	Completed - Ongoing	<p>The Grounds Site Stewardship Program (GSSP) continued to be staffed on a half time basis by campus gardener, Bill Reid, with oversight by Asst. Supt, Dave Roe, and student coordinator and intern, David Will. As in 2006-07, the program averaged two, 2-unit interns from Environmental Studies each quarter. Ten separate volunteer days were organized utilizing a total of 346 volunteer hours with tasks ranging from invasive plant and weed removal to restoration projects of planting native species, spreading mulch, narrowing paths, propagating and planting native species and installing erosion control features. The Grounds Landscape CUIP contributed an additional 276 hours of intern work within the GSSP.</p>
AES-5D	Physical Plant	Continue Site Stewardship Program.	Completed - Ongoing	<p>The Grounds Site Stewardship Program (GSSP) 2006-07 was very active and connected with many students, faculty and staff. GSSP is staffed by Grounds Gardener, Bill Reid, and oversight by Assistant Superintendent, Dave Roe; with student coordinator and CUIP, Lucy Lynn. Also, the program averaged two, 2-unit interns from Environmental Studies each quarter.</p> <p>GSSP Lead Volunteer Days – 7 Days, 250 volunteer hours</p> <ul style="list-style-type: none"> <li>• Ad hoc path mitigation work</li> <li>• Jordan Gulch path mulch and erosion control</li> <li>• LML earthen berm brush removal to support planted area of native perennials.</li> <li>• Great Meadow exotic invasive weed removal (mostly broom).</li> <li>• Cowell meadow bowl restoration</li> <li>• 2 planting days on LML earthen berm.</li> </ul> <p>Grassland monitoring by GSSP with 5-unit student intern</p>
AES-6B	PP&C	Minimize light pollution in new development projects.	Completed - Ongoing	<p>Campus Standards include the lighting design requirements specified in the mitigation: General Building Requirements Part II F and Campus Standards Handbook Section 16530 require that lighting be required for safety only and that decorative lighting be used only under certain circumstances and upon approval of Campus Architect .</p> <p>Site Requirements Part III H states that lighting with non-glare downlighting characteristics is preferred for all areas around buildings; forest areas are to be illuminated with non-directional fixtures that provide light throughout the surrounding area.</p>

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Mitigation ID	Unit	Mitigation Description	Status	Status Description
AES-6B	PP&C	Minimize light pollution in new development projects.	Completed - Ongoing	<p>Campus Standards include the lighting design requirements specified in the mitigation: General Building Requirements Part II F and Campus Standards Handbook Section 16530 require that lighting be required for safety only and that decorative lighting be used only upon approval of Campus Architect under certain circumstances.</p> <p>Site Requirements Part III H states that lighting with non-glare downlighting characteristics is preferred for all areas around buildings; for safety reasons, forest areas are to be illuminated with non-directional fixtures that provide light throughout the surrounding area.</p>
AES-6B	PP&C	Minimize light pollution in new development projects.		<p>Campus standards for lighting have not changed during the past year. Campus is currently installing test prototypes for induction lamp fixtures that, if approved, will provide the same light pollution mitigation with less energy usage. Report provided by Rhonda Tramble, Senior Engineer, 9/10/09.</p>
AES-6D	OPERS	Turn off field lights at 11 PM.	Not Triggered	OPERS currently does not have any field lights
AES-6D	OPERS	Turn off field lights at 11 PM.	Not Triggered	OPERS has no field lights at this time (information provided by Ryan Andrews, OPERS via email, Dec. 11, 2007)
AES-6D	OPERS	Turn off field lights at 11 PM.		OPERS does not have any field lights at this time. Information provided by Ryan Andrews, Executive Director of OPERS, 9/11/09.
AES-6E	PP&C	DAB review outdoor lighting	Completed - Ongoing	<p>Campus Standards include the lighting design requirements specified in the mitigation: General Building Requirements Part II F and Campus Standards Handbook Section 16530 require that lighting be required for safety only and that decorative lighting be used only under certain circumstances and upon approval of Campus Architect .</p> <p>Site Requirements Part III H states that lighting with non-glare downlighting characteristics is preferred for all areas around buildings; for safety reasons, forest areas are to be illuminated with non-directional fixtures that provide light throughout the surrounding area.</p>

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AES-6E	PP&C	DAB review outdoor lighting	Completed - Ongoing	<p>Campus Standards include the lighting design requirements specified in the mitigation: General Building Requirements Part II F and Campus Standards Handbook Section 16530 require that lighting be required for safety only and that decorative lighting be used only upon approval of Campus Architect under certain circumstances.</p> <p>Site Requirements Part III H states that lighting with non-glare downlighting characteristics is preferred for all areas around buildings; forest areas are to be illuminated with non-directional fixtures that provide light throughout the surrounding area.</p>
AIR-1	PP&C	Construction dust control.	Completed - Ongoing	Currently each project manager is individually adding the applicable mitigation measures to Division 1. PP&C is planning to update the Division 1 template. For each project, the Project Manager will review the template, select the applicable measures, and report on the selected measures and their implementation in the project mitigation monitoring report.
AIR-1	PP&C	Construction dust control.	Completed - Ongoing	Currently each project manager is individually adding the applicable mitigation measures to Division 1. PP&C is planning to update the Division 1 template. For each project, the Project Manager will review the template, select the applicable measures, and report on the selected measures and their implementation in the project mitigation monitoring report.
AIR-4A	PP&C	Work with AMBAG on regional population forecasts.	Completed - No Further Action	Completed in 2006-07. John Barnes, Director of Campus Planning wrote to AMBAG on April 17, 2007, providing projected 2020 campus population for UC Santa Cruz, requesting that this information be incorporated into AMBAG's population database.
AIR-4A	PP&C	Work with AMBAG on regional population forecasts.	Completed - No Further Action	John Barnes, Director of Campus Planning wrote to AMBAG on April 17, 2007, providing projected 2020 campus population for UC Santa Cruz, requesting that this information be incorporated into AMBAG's population database. Letter is attached.
AIR-4B	PP&C	Work with MBUAPCD on campus growth-related emissions.	Completed - No Further Action	Completed in 2006-07. John Barnes, Director of Campus Planning wrote to MBUAPCD on April 17, 2007, providing projected 2020 campus population for UC Santa Cruz, requesting that this information be incorporated into MBUAPCD's population database.
AIR-4B	PP&C	Work with MBUAPCD on campus growth-related emissions.	Completed - No Further Action	John Barnes, Director of Campus Planning wrote to MBUAPCD on April 17, 2007, providing projected 2020 campus population for UC Santa Cruz, requesting that this information be incorporated into MBUAPCD's population database. Letter is attached.

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Mitigation ID	Unit	Mitigation Description	Status	Status Description
AIR-5A	Physical Plant	Generator testing schedule.	Completed - Ongoing	The generators are tested per the mitigation measure and Physical Plant is abiding by table 4.3-22.
AIR-5A	Physical Plant	Generator testing schedule.	Completed - Ongoing	Generator testing schedule is consistent with the mitigation. (Information from Mike Hanson, Physical Plant, in email forwarded by Jim Dunne, 2/4/08)
AIR-5A	Physical Plant	Generator testing schedule.		The generators are tested per the mitigation measure and Physical Plant is abiding by table 4.3-22. See preventative maintenance records as needed.
AIR-5B-PP	Physical Plant	Cogeneration system emissions	Not Triggered	Cogeneration system has not been replaced. Testing is planned for 2009, which is consistent with the mitigation.
AIR-5B-PP	Physical Plant	Cogeneration system emissions	Not Triggered	No action required in this reporting year. Cogeneration system was not replaced and testing was not conducted.
AIR-5B-PP	Physical Plant	Cogeneration system emissions		Cogeneration system has not been replaced. There is currently no State approved methodology for accurate measurement of acrolein emissions, per UCSC EH&S and the MPBUAPCD. We are currently in discussion with UCSC's EH&S dept on how to proceed with this mitigation issue, due to the above.
AIR-6	PP&C	Minimize construction air pollutant emissions.	In Progress	Campus is working on a revision to the Division 1 template that will include this requirement.
AIR-6	PP&C	Minimize construction air pollutant emissions.	In Progress	Campus is working on a revision to the Division 1 template that will include this requirement.
AIR-7	PP&C	Reduce toxic air contaminant emissions.	Completed - Ongoing	Campus Standards Handbook Section 16600 specifies the use of natural gas and/or propane for emergency and stand-by generators.
AIR-7	PP&C	Reduce toxic air contaminant emissions.	Completed - Ongoing	Campus Standards Handbook Section 16600 specifies the use of natural gas and/or propane for emergency and stand-by generators.
AIR-7	PP&C	Reduce toxic air contaminant emissions.		Campus Standards Handbook Section 16600 specifies the use of natural gas and/or propane for emergency and stand-by generators. Report provided by Rhonda Tramble, Senior Engineer, 9/10/09.

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<b>Mitigation ID</b>	<b>Unit</b>	<b>Mitigation Description</b>	<b>Status</b>	<b>Status Description</b>
BIO-15	Arboretum	Arboretum fencing allow mammal movement	Completed - Ongoing	At the present time there is a temporary deer fence does not restrict movement of deer, bob cats, coyotes etc. The Arboretum is in the process of developing plans for a permanent deer fence which will effectively restrict deer but allow bob cats and coyotes through. The planned fencing will provide a wildlife corridors through the areas to enhance the movement of animals. (information provided by Brett Hall in email dated 3/10/09)
BIO-15	Arboretum	Arboretum fencing allow mammal movement	Completed - Ongoing	According to Brett Hall, Director of Horticulture, UCSC Arboretum, the only fences that have been constructed are surrounding individual plants or clusters of plants. No fences have been constructed that would obstruct mammal movement across or through the Moore Creek drainage.
BIO-7A-	Police	Ohlone tiger beetle protection in Marshall Field.	Not Triggered	On the recommendations of Richard Arnold of Entomological Consulting Services, the temporary fencing in Marshall Field during Jan.-June have been discontinued. Therefore, additional patrolling of the area during that season is not required at this time. No reporting is required for the 2007-08 reporting year.
BIO-7A-	Police	Ohlone tiger beetle protection in Marshall Field.	Completed - Ongoing	The UCSC Police Department conducted a patrol operation in the wooded areas of the north campus during the summer. The operation was to locate and/or prevent illegal camping and bicycle operation in the Tiger Beetle area of the north campus. The operation was conducted over a period of two days during the summer. Due to other public safety commitments to the campus, no further actions were taken in the affected area.
BIO-7A-PP	Physical Plant	Ohlone tiger beetle protection in Marshall Field.	Not Triggered	During December 2005, Physical Plant successfully petitioned USF&WS for a minor amendment to the UCSC RVT HCP to discontinue the temporary fencing and resort to only using the permanent OTB signs. In addition to the RVT HCP affected grasslands, the temporary fences were also discontinued on Marshall Fields. In previous years, the patrolling by Physical Plant was to maintain the temporary OTB fences and signs. In the absence of these temporary measures, formal Grounds patrols were discontinued.
BIO-7A-PP	Physical Plant	Ohlone tiger beetle protection in Marshall Field.	Not Triggered	Temporary fencing and signage was not installed during this 2006-07 OTB season. During December 2005, Physical Plant successfully petitioned USF&WS for a minor amendment to the UCSC RVT HCP to discontinue the temporary fencing and resort to only using the permanent OTB signs. In addition to the RVT HCP affected grasslands, the temporary fences were also discontinued on Marshall Fields.

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BIO-7B	Arboretum	USFWS consultation on Arboretum fencing	Completed - No Further Action	Mitigation was completed in 2007. PP&C staff (Sally Morgan) and Arboretum Staff (Brett Hall) consulted with USFWS staff (Dave Pereksta and Roger Root) during a campus visit in June 2007. USFWS staff said they had no concerns with any fencing in the area.
BIO-7B	Arboretum	USFWS consultation on Arboretum fencing	Completed - No Further Action	PP&C staff (Sally Morgan) and Arboretum Staff (Brett Hall) consulted with USFWS staff (Dave Pereksta and Roger Root) during a campus visit in June 2007. USFWS staff said they had no concerns with any fencing in the area.
BIO-8A-	CNR	Cave signs and educational material.	In Progress	Campus Natural Reserve (CNR) staff have conducted outreach to individuals seeking access to campus caves. Individuals are informed of the sensitive habitats and that access and use of the caves is forbidden. Campus art work for educational signs has been completed by students working under Dr. Sinervo; final design for the signage is being discussed. It is anticipated that signs will be placed in 2009. Educational material for cave ecosystems on the Campus Reserve is being updated and will be incorporated into the CNR website and educational pamphlets. Information in these outlets will highlight the need to conserve and protect these rare and unique ecosystems on UCSC campus.
BIO-8A-	CNR	Cave signs and educational material.	In Progress	CNR is working on the text and artwork for the sign and expects to complete it soon.
BIO-8A-	CNR	Cave signs and educational material.		Campus Natural Reserve (CNR) staff are working with a designer to finalize art work and layout of educational signs. It is anticipated that signs will be placed in the fall of 2009. The CNR website was updated to include information on the cave species and the threat posed to them by recreational use of the caves. The web page is at: <a href="http://ucreserve.ucsc.edu/UCSCCNR/caves.html">http://ucreserve.ucsc.edu/UCSCCNR/caves.html</a> Report provided by Gage Dayton, Director, UCSC Natural Reserves, 9/16 and 9/17/2009.
BIO-8A-PP	Physical Plant	Signs and educational material to protect caves.	In Progress	Sign has not been installed. CNR is still working on the wording for the signs.
BIO-8A-PP	Physical Plant	Signs and educational material to protect caves.	In Progress	The Campus Natural Reserve is still creating the design and wording and Physical Plant will install / maintain the sign when sign is complete.

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BIO-8B-PP	Physical Plant	Cave barrier.	Not Triggered	PP&C staff consulted with USFWS staff in 2007. USFWS staff said they felt there was no concern for federally listed species but cautioned that any barrier would need to take into account access and egress for bats. They suggested the campus consider no-trespassing signs and possibly removing the existing access ladder. PP&C staff emailed Serge Glushkoff of the CDFG on July 5, 2007, asking him if he would be available for a field visit to the caves or if he would prefer a phone consultation. Mr. Glushkoff said he would like to visit and would contact UCSC if he could make time. Ms. Morgan emailed him back asking if he had thoughts about a barrier in the meantime but he has not yet responded. No additional action was required of Physical Plant in 2007-08.
BIO-8B-PP	Physical Plant	Cave barrier.	Not Triggered	PP&C staff consulted with USFWS and CDFG. Barrier was not recommended by agencies. Therefore, Physical Plant action was not triggered.
BIO-8B-	PP&C	Consult with agencies on cave barrier design.	Completed - Ongoing	Consultation with USFWS was completed in 2006-07. PP&C staff consulted with USFWS staff in 2007. USFWS staff said they felt there was no concern for federally listed species but cautioned that any barrier would need to take into account access and egress for bats. They suggested the campus consider no-trespassing signs and possibly removing the existing access ladder. PP&C staff emailed Serge Glushkoff of the CDFG on July 5, 2007, asking him if he would be available for a field visit to the caves or if he would prefer a phone consultation. Mr. Glushkoff said he would like to visit and would contact UCSC if he could make time. Ms. Morgan emailed him back asking if he had thoughts about a barrier in the meantime but he has not yet responded.
BIO-8B-	PP&C	Consult with agencies on cave barrier design.	Completed - Ongoing	PP&C staff consulted with USFWS staff Dave Pereksta and Roger Root during a campus visit on July 5, 2007. USFWS staff visited the cave and said they felt there was no real issue related to federally listed species. They cautioned that any barrier would need to take into account access and egress for bats. They suggested the campus consider no-trespassing signs and possibly removing the existing access ladder. PP&C staff (Sally Morgan) emailed Serge Glushkoff of the CDFG on July 5, 2007, asking him if he would be available for a field visit to the caves or if he would prefer a phone consultation. Mr. Glushkoff said he would like to visit and would contact UCSC if he could make time. Ms. Morgan emailed him back asking if he had thoughts about a barrier in the meantime but he has not yet responded.

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CULT-1B-	Physical Plant	Archaeological resource training for campus employees.	Completed - Ongoing	Training was held on 01/23/08. Name and title of trainer: Sally Morgan, Sr. Environmental Planner, PP&C. Number of Grounds staff who attended: 42 Number of Grounds staff who did not attend: 7
CULT-1B-	Physical Plant	Archaeological resource training for campus employees.	In Progress	Training was not conducted during the reporting year but is planned for January 2008. (Information from Dean Raven, Sr. Superintendent, Grounds, 11/14/07)
HAZ-10A	Fire Dept	Annual/biennial building inspections	Completed - Ongoing	Inspections of buildings were conducted as specified in the mitigation. Documentation is maintained in the fire department records management system.
HAZ-10A	Fire Dept	Annual/biennial building inspections	Completed - Ongoing	Inspections of buildings were conducted as specified in the mitigation. Documentation is maintained in the fire department records management system.
HAZ-10B	Physical Plant	Develop and implement Vegetation Management Plan	Not Triggered	Construction on north campus is not currently planned or under construction. No action was required in the reporting year.
HAZ-10B	Physical Plant	Develop and implement Vegetation Management Plan	Not Triggered	No development of north campus this year.
HAZ-10C	Physical Plant	Wildland fire prevention signage.	Not Triggered	Construction on north campus is not currently planned or under construction. No action was required in the reporting year.
HAZ-10C	Physical Plant	Wildland fire prevention signage.	Not Triggered	No development of north campus this year.



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HAZ-2	EH&S	Enhance hazardous waste minimization program.	Completed - Ongoing	<p>Total hazardous waste generated for FY07/08 was 59,967 pounds. This year EH&amp;S purchased a desk scale to provide accurate waste container weights. This data is captured during receiving at the waste facility and is incorporated into the data base to provide precise reporting of weight generated by individual generators. Continuing enhancements are being made to the campus waste tracking system to improve our ability to track waste generation and provide a variety of reports.</p> <p>UCSC continues to reduce potential campus hazardous waste by recycling batteries, fluorescent lamps and electronic waste. Updates and educational outreach regarding the ever evolving universal waste programs are provided during laboratory safety meetings, waste generator training classes and one-on-one conversations.</p>
HAZ-2	EH&S	Enhance hazardous waste minimization program.	Completed - Ongoing	<p>EH&amp;S determined that it would be more appropriate to monitor hazardous waste generation for the past fiscal year. Records indicate that total hazardous waste generated for FY06-07 was 58,093 pounds. This information was collated from hazardous waste manifests.</p> <p>Modifications have been made to the campus waste tracking system and data base to facilitate our ability to track waste generation by individual generators. We anticipate this data will be useful in identifying activities where potential additional reductions of waste may be possible.</p> <p>Installation of a solvent purification system the Physical Sciences (Chemistry) Building in December of 2006 has affected a 10% to 20% reduction in solvent waste generated by solvent-intense research activities.</p> <p>UCSC has reduced potential campus hazardous waste by recycling the following universal wastes:</p> <ul style="list-style-type: none"> <li>Batteries – 876 pounds</li> </ul>
HAZ-9A	PP&C	Construction road closure procedures.	Completed - Ongoing	<p>The Division 1 template includes the requirements specified in the mitigation.</p>
HAZ-9A	PP&C	Construction road closure procedures.	Completed - Ongoing	<p>The Division 1 template includes the requirements specified in the mitigation.</p>
HAZ-9B	Fire Dept	Test and update EOP.	Completed - Ongoing	<p>Minor updates were made during 2007/08. Plan is on web at <a href="http://emergency.ucsc.edu">http://emergency.ucsc.edu</a>.</p> <p>Policy group exercises to test EOP were held in fall and spring.</p>

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HAZ-9B	Fire Dept	Test and update EOP.	Completed - Ongoing	The campus emergency response plan was updated in April 2007. It can be viewed at <a href="http://emergency.ucsc.edu">http://emergency.ucsc.edu</a> . The EOP was tested during the reporting year.
HAZ-9C	Fire Dept	EOPs for 2300 Delaware and north campus.	Not Triggered	Construction of the north loop road has not begun. Building C has not been occupied (other than for storage). Therefore, this mitigation has not been triggered and no reporting is required for the 2007-08 reporting year.
HAZ-9C	Fire Dept	EOPs for 2300 Delaware and north campus.	Not Triggered	Construction of the north loop road has not begun. Building C has not been occupied (other than for storage). Therefore, this mitigation has not been triggered and no reporting is required for the 2007-08 reporting year.
HAZ-9D	PP&C	Secondary emergency egress route for north campus.	Not Triggered	North campus development is not currently planned or under construction. Mitigation has not been triggered.
HAZ-9D	PP&C	Secondary emergency egress route for north campus.	Not Triggered	No north campus development has been occupied and none is under construction.
HYD-2A	PP&C	Construction site controls, sites less than 1 acre.	Completed - Ongoing	Division 1 section 01560 1.03 A.4 requires the following that the Contractor shall comply with Appendix D Erosion and Sediment Control Standards for Projects Under One Acre-has been added to the Campus Standards.
HYD-2A	PP&C	Construction site controls, sites less than 1 acre.	Completed - Ongoing	The following appendix has been added to the Campus Standards to address erosion control: Appendix D - Erosion and Sediment Control Standards For Projects Under One Acre. Division 1 section 01560 1.03 A.4 requires the following: The Contractor shall comply with Appendix D Erosion and Sediment Control Standards.
HYD-2B	PP&C	Erosion controls for grading on hillsides.	Completed - Ongoing	Sediment control measures are a required element of the campus Storm Water Pollution Prevention Plan template, which must be prepared for all projects disturbing more than 1 acre of land. Sediment control measures are included in the Erosion and Sediment Control Standards for Projects Under One Acre.
HYD-2B	PP&C	Erosion controls for grading on hillsides.	Completed - Ongoing	Currently each project manager is individually adding the applicable mitigation measures to Division 1. By September 2008 the mitigation measures will be included in the Division 1 template. For each project, the Project Manager will review the template, select the applicable measures, and report on the selected measures and their implementation in the project mitigation monitoring report.
HYD-3A	Physical Plant	Signs and public education about importance of staying on paved roads and approved paths.	Completed - Ongoing	Additional signs and fences were placed and replaced at the entrance to upper Jordan Gulch from College 9 Namaste area affected by shortcutting trails. Signs were also added at LML, at the earthen berm and the new planted area adjacent to the new sea-water storage tank.

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HYD-3A	Physical Plant	Signs and public education about importance of staying on paved roads and approved paths.	Completed - Ongoing	Temporary fences and six meadow restoration signs were posted around the Cowell Meadow to keep pedestrian traffic off ad hoc trails and back on paved walkways. Permanent fences and four restoration signs were placed along McLaughlin Drive in two areas and along the College 10 Service Road to stop the short cutting trails.
HYD-3A	PP&C	Signs and public education about importance of staying on paved roads and approved paths.	Completed - Ongoing	PP&C staff worked with TAPS staff to identify appropriate maps for this notation. TAPS will be preparing a campus walking guide to be distributed to all new students. Map notation and information about the importance of staying on formal paths will be included in that document.
HYD-3A	PP&C	Signs and public education about importance of staying on paved roads and approved paths.	In Progress	Campus maps have not yet been updated as specified in the mitigation. PP&C is working with other units to identify the appropriate maps and to develop the language.
HYD-3B-PP	Physical Plant	Erosion control measures for fire roads.	Completed - Ongoing	Re-defined water bars and rolling depressions and cleared debris accumulated against the silt fencing at drainage outlets off the fire roads. Removed / replaced silt fencing as needed. Cleared culverts and drainage inlets of vegetation / debris.
HYD-3B-PP	Physical Plant	Erosion control measures for fire roads.	Completed - Ongoing	Re-defined water bars, rolling depressions and installed silt fencing in drainage outlets off the fire roads. Cleared culverts and drainage inlets of vegetation/debris.
HYD-3D	PP&C	Low-impact development measures for new development.	Completed - Ongoing	Campus has developed a draft protocol, which will be incorporated into the Executive Design Professional Agreement by July 2009. Design features such as those described in the mitigation have been or are being incorporated into the design of the Biomedical Sciences Facility, the Cowell Student Health Center Expansion and Renovation project, the Porter College House A project and the East Campus Infill Housing project.
HYD-3D	PP&C	Low-impact development measures for new development.	Completed - Ongoing	Campus has developed a draft protocol, which will be incorporated into The Executive Design Professional Agreement by September 2008. Design features such as those described in the mitigation have been incorporated into the design of the Biomedical Sciences Facility and the Cowell Student Health Center Expansion and Renovation project.
HYD-5C	PP&C	Aquifer monitoring.	Not Triggered	Campus did not used the well to supply water in the reporting year. No action on this was required.
HYD-5C	PP&C	Aquifer monitoring.	Not Triggered	Campus well was not used to supply water during the reporting year.

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NOIS-1	PP&C	Construction noise controls.	Completed - Ongoing	Currently each project manager is individually adding the applicable mitigation measures to Division 1. By September 2009 the mitigation measures will be included in the Division 1 template. For each project, the Project Manager will review the template, select the applicable measures, and report on the selected measures.
NOIS-1	PP&C	Construction noise controls.	Completed - Ongoing	Currently each project manager is individually adding the applicable mitigation measures to Division 1. By September 2008 the mitigation measures will be included in the Division 1 template. For each project, the Project Manager will review the template, select the applicable measures, and report on the selected measures and their implementation in the project mitigation monitoring report.
NOIS-2	PP&C	Contractors use City-designated truck routes.	In Progress	PP&C has not yet updated the Division 1 template to include this requirement. Campus is working on a revision to the Division 1 template that will include this requirement.
NOIS-2	PP&C	Contractors use City-designated truck routes.	In Progress	PP&C has not yet updated the Division 1 template to include this requirement. PP&C is working on a revision of the Division 1 template that will include this requirement.
POP-3A	CUHS	Campus housing accommodate 50% of undergraduates and 25 percent of graduate students.	Completed - Ongoing	Monitoring was conducted that included campus student enrollment and housing capacity for undergraduate and graduate student populations. Student housing capacity in 2007-08 was at 51.0% of undergraduate student enrollment, and 27.1% of graduate student enrollment.
POP-3A	CUHS	Campus housing accommodate 50% of undergraduates and 25 percent of graduate students.	Completed - Ongoing	Monitoring was conducted in June 2007 that included campus student enrollment and housing capacity for undergraduate and graduate student populations. Student housing capacity in 2006-07 was at 50% of undergraduate student enrollment, and 25% of graduate student enrollment. See supporting documentation: 2006-07 Student Housing Capacity & Adjusted Enrollment.
POP-3B	CUHS	Housing collaboration study.	Completed - No Further Action	Report was completed in September 2008. Brailsford and Dunlevey, September 2007. Campus Housing and Market Study.
POP-3B	CUHS	Housing collaboration study.	Completed - Ongoing	Brailsford and Dunlavey (Consultants) have been hired are in currently in process of completing this study, with final report expected in February 2008.
POP-3C	CUHS	Housing market analysis.	Completed - Ongoing	Report was completed in September 2008. Brailsford and Dunlevey, September 2007. Campus Housing and Market Study.
POP-3C	CUHS	Housing market analysis.	Completed - Ongoing	Brailsford and Dunlevey have been hired and are in the process of completing the report.

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REC-2C-PP	Physical Plant	Discourage illegal bicycle use on Pogonip trails.	Completed - Ongoing	Four additional signs have been placed, advising the population they are leaving the University, entering Pogonip and notified to adhere to City Park regulations. Signs were placed on Rincon Rd., U-Con trail, Coolidge Rd. lookout, and Spring Road / trail. Fences were surveyed and repaired 3-27-07 by Grounds Services
REC-2C-PP	Physical Plant	Discourage illegal bicycle use on Pogonip trails.	Completed - Ongoing	Four additional signs have been placed, advising the population they are leaving the University, entering Pogonip and notified to adhere to City Park regulations. Signs were placed on Rincon Rd., U-Con trail, Coolidge Rd. lookout, and Spring Road / trail. Fences were surveyed and repaired 3-27-07 by Grounds Services.
REC-2C-PP	Physical Plant	Discourage illegal bicycle use on Pogonip trails.		Four additional signs have been placed, advising the population they are leaving the University, entering Pogonip and notified to adhere to City Park regulations. Signs were placed on Rincon Rd., U-Con trail, Coolidge Rd. lookout, and Spring Road / trail. Fences were surveyed and repaired 02-02-09 by Grounds Services.
REC-2C-	TAPS	Discourage illegal bicycle use on Pogonip trails.	In Progress	The Campus Bike Plan was completed in Fall 2008 and approved as an amendment to the City Bike Plan by the Santa Cruz City Council in December 2008. The campus bike map in the Bike Plan shows the campus/Pogonip boundary but does not show the Pogonip rules regarding bicycle use. The next update to the campus bike map that is posted on the TAPS website or printed will include these rules.
REC-2C-	TAPS	Discourage illegal bicycle use on Pogonip trails.		TAPS did not complete a report for 2006-07.
REC-2D-PP	Physical Plant	Coordinate with City on volunteer trail maintenance days.	Not Triggered	Dean Fitch (PP&C) consulted with Susan Harris, of City Parks and Recreation, about this mitigation in September 2008. City currently does not have a volunteer trail maintenance program but hopes to implement one, and asks that the campus check with ranger in future years.
REC-2D-PP	Physical Plant	Coordinate with City on volunteer trail maintenance days.	In Progress	Mitigation was not implemented in 2006-07.

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
REC-4	OPERS	Recreational facilities available to public	Completed - Ongoing	Recreational Amenities are available for public use. These include the track, outdoor exercise spaces (Park Course) and fields located at the East Field House complex. The public can also purchase a community Wellness Card to access all other facilities at OPERS (pool, Wellness Center, etc.). Information about public access to our facilities is available on the OPERS web page: <a href="http://www2.ucsc.edu/opers/homepage/wellnesscards.html">http://www2.ucsc.edu/opers/homepage/wellnesscards.html</a>
REC-4	OPERS	Recreational facilities available to public	Completed - Ongoing	Campus recreational facilities available to the public during the reporting year. Provide documentation, including copies of public advertising. Casual recreational amenities are available on the campus for public use. UCSC walking map is also provided on OPERS website and map of trails for bicyclists, pedestrians and equestrians on the upper campus is available on the TAPS website. (information provided by Ryan Andrews, OPERS via email, Dec. 11, 2007)
REC-4	OPERS	Recreational facilities available to public		Recreational Amenities are available for public use. These include the track, outdoor exercise spaces (Park Course) and fields located at the East Field House complex. The public can also purchase a community Wellness Card to access all other facilities at OPERS (pool, Wellness Center, etc.).  Please view our web page for information about public access to our facilities: <a href="http://www2.ucsc.edu/opers/WellnessCards/wellnesscards.html">http://www2.ucsc.edu/opers/WellnessCards/wellnesscards.html</a>  Report provided by Ryan Andrews, Executive Director of OPERS, 9/11/09.
TRA-1	TAPS	Monitoring and improve campus intersections.	Not Triggered	Next monitoring study will be done in 2010.
TRA-1	TAPS	Monitoring and improve campus intersections.		TAPS did not complete a report for 2006-07.

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
TRA-2A-PB	P&B	Pay fair share of improvements to City intersections	Completed - No Further Action	As part of the August 2008 Comprehensive Settlement Agreements, the City and the University agreed on the University's share of intersection improvements identified in the 2005 LRDP EIR. As agreed in the Settlement Agreement, UCSC made a contribution to the City in 2008 in an amount equivalent to the City's Traffic Impact Fee per trip for 3,900 projected additional average daily trips through the main campus gates. This contribution accounts for all new main campus vehicle trips projected to be generated by the campus during the period covered by the 2005 LRDP up to a total average daily trips to the main campus of 28,700.
TRA-2A-PB	P&B	Pay fair share of improvements to City intersections	Not Triggered	During 2006-07, the University was in settlement negotiations with the City regarding the methodology for determining the University's share of the cost of the improvements.
TRA-2A-	TAPS	Monitor and contribute to improvements to City intersections.	Not Triggered	Monitoring not required in 2007-08.
TRA-2A-	TAPS	Monitor and contribute to improvements to City intersections.		TAPS did not complete a report for 2006-07.
TRA-2B	TAPS	Expand TDM programs.	Completed - Ongoing	<p>1) A summary of the campus' TDM measures and their effectiveness is provided in the TAPS Effectiveness Matrix .</p> <p>2) Three Level 1 and two Level 2 programs were implemented during 2007-08:</p> <ul style="list-style-type: none"> <li>• The Commuter Vanpool program expanded to 22 vans and 257 participants;</li> <li>• A fourth Bike Shuttle began operation from the UCSC Inn in Spring 2008;</li> <li>• The UCSC Zipcar program commenced in September 2007, ending its first year with 500 active members and average utilization of nine cars over 35%;</li> <li>• Zipcar's carsharing program accommodated members 18 years and older from implementation;</li> <li>• TAPS began a student-directed project with the Baskin School of Engineering to develop and install real-time vehicle location systems in Campus Transit vehicles.</li> </ul> <p>3) Modal mix studies were conducted in Fall 2007 and Spring 2008 with similar results.</p> <p>4) The Spring 2008 study determined that 57.99% of all passenger-trips entering</p>
TRA-2B	TAPS	Expand TDM programs.		TAPS did not complete a report for 2006-07.

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
TRA-3B	TAPS	Parking monitoring and construction.	Completed - Ongoing	<p>1) No changes were made to the parking zone definitions during 2007-08.</p> <p>2) The Spring 2008 Parking Utilization Survey is on file at UCSC Physical Planning &amp; Construction.</p> <p>3) 2300 Delaware Avenue Building C has not been occupied.</p> <p>4) Projects underway or commencing in the near future that generate temporary or permanent parking impacts include:</p> <ul style="list-style-type: none"> <li>• Digital Arts Facility (temporary loss of ~40 parking spaces, equivalent to one-quarter the capacity of Performing Arts lot #126); event-related impacts mitigated by controlled access to contractor parking area.</li> <li>• Biomedical Sciences Facility (permanent loss of ~40 spaces in Lot 121); demand accommodated by available spaces in Core West parking structure and at Cowell Health Center.</li> <li>• Cowell Health Center Seismic Improvements (temporary loss of 5-10 spaces).</li> </ul> <p>5) Based on Spring 2008 parking utilization survey, ample parking capacity exists</p>
TRA-3B	TAPS	Parking monitoring and construction.		TAPS did not complete a report for 2006-07.
TRA-3C	TAPS	Parking management systems.	Completed - Ongoing	<p>1) Use of two mobile changeable message signs has helped direct visitors to specific areas of campus during major campus events.</p> <p>2) No new parking information systems have been pursued at this time.</p> <p>3) TAPS staff are pursuing installation of improved parking “pay stations” at Core West, Performing Arts and Hahn Student Services parking lots in the coming year to provide more flexible and secure short-term parking management during evenings and weekends.</p>
TRA-3C	TAPS	Parking management systems.		TAPS did not complete a report for 2006-07.
TRA-4A	TAPS	Monitor transit efficiency.	Completed - Ongoing	<p>Transit travel times for Day Shuttle routes (Loop or Upper Campus) from Oakes College to Cowell College are monitored throughout each academic quarter. While on-campus traffic volumes have remained constant or declined (as monitored by semi-annual hose counts), pedestrian traffic volumes crossing roadways within the central campus have resulted in longer transit cycle times during class break periods. In general, however, Campus Transit and SCMTD buses continue to provide adequate transit cycle times.</p>



**Table 2: Mitigation Status Detail 2006-2007**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
TRA-4A	TAPS	Monitor transit efficiency.		TAPS did not complete a report for 2006-07.
TRA-4B	TAPS	Improve transit efficiency.	Completed - Ongoing	<p>1) SCMTD, under contract with UCSC, began operation of the 27X “Limited Express” transit service between downtown Santa Cruz and the campus with the start of the Fall 2007 academic quarter. This service operates weekdays during the regular school term, and provides short travel-times by serving only a limited number of on-campus and off-campus stops. Ridership during the first year of service was adequate to continue service into 2008-09.</p> <p>2) TAPS staff continue to work with representatives of SCMTD, SCCRTC, the City of Santa Cruz, and Caltrans to identify “Bus Rapid Transit” options for improving transit service between downtown Santa Cruz and the main campus.</p>
TRA-4B	TAPS	Improve transit efficiency.		TAPS did not complete a report for 2006-07.
TRA-4D-PB	P&B	Coordinate roadway and circulation improvements with pace of campus development	Completed - Ongoing	<p>The Chinquapin Sidewalk Project, planned for construction in spring-summer 2009, will add a sidewalk to the west side of Chinquapin and the north side of McLaughlin between Chinquapin and the Crown/Merrill bus stop.</p> <p>The campus has obtained a grant to install a signal at the west entrance, and plans to complete this work in summer 2009.</p> <p>The Heller Drive Pavement Rehabilitation project, planned for construction in summer 2009, will re-stripe the road to provide a bike lane from the west entrance to College Eight.</p> <p>Additional circulation improvements are planned as part of the Infrastructure Improvements Project, Phase 4. This is included in the University’s 2008-2013 Capital Budget, with planning phase anticipated in 2011-12.</p>
TRA-4D-PB	P&B	Coordinate roadway and circulation improvements with pace of campus development	Not Triggered	Project CEQA documents during 2006-07 (Biomedical Sciences Facility, Cowell Student Health Center Expansion and Renovation) did not identify any necessary campus roadway and circulation improvements. The campus prepared schematic design documents for the Heller Drive Bike Lane project and applied for but did not receive a grant to construct Phase 1 (restriping to create an uphill bike lane from Meyer Drive to McLaughlin).

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
TRA-4D-	TAPS	Campus roadway and circulation improvements.	Completed - Ongoing	TAPS staff continue to work on several roadway and circulation projects: <ul style="list-style-type: none"> <li>• West Entrance Signal Project funds installation of traffic signal controls at the intersection of Heller Drive and Empire Grade. Funding provided by an external grant and TAPS revenues.</li> <li>• Ranch View Terrace/Bike Path Intersection construction slated for construction during Summer 2008.</li> <li>• Heller Drive Bike Lane is a three-phase project to construct Caltrans-compliant Class II bike lanes on the uphill side of Heller from Empire Grade to McLaughlin, and on the downhill side between College Eight and Empire Grade. Planning &amp; Budget is aware of these grant-funded projects.</li> </ul>
TRA-4D-	TAPS	Campus roadway and circulation improvements.		TAPS did not complete a report for 2006-07.
TRA-4E	TAPS	Bicycle circulation improvements.	Completed - Ongoing	1) The UCSC Bike Plan was finalized during Fall 2008 and approved (as an amendment to the City of Santa Cruz Bike Plan) by the City Council in December 2008. The plan may be downloaded at: <a href="http://www2.ucsc.edu/taps/bicycleprograms.html">http://www2.ucsc.edu/taps/bicycleprograms.html</a> 2) The Heller Drive Bike Lane consists of several phased projects dependent upon external funding, and has yet to secure that funding. Other improvements—including a bike lane on the uphill side of Chinquapin and improvements to the Ranch View Terrace/Bike Path intersection—are slated for implementation during 2008-09.
TRA-4E	TAPS	Bicycle circulation improvements.		TAPS did not complete a report for 2006-07.
TRA-4F	TAPS	Wayfinding systems.	In Progress	1) No work was done on a pedestrian plan during 2007-08. However, preliminary work was started on modifying the campus signage standards to improve wayfinding. This work is continuing during 2008-09. 2) Several elements of an improved way-finding system include: <ul style="list-style-type: none"> <li>• Standardized street names and signage;</li> <li>• Consistent sign standards for streets, buildings, and supporting infrastructure;</li> <li>• A hierarchy of area-based directional systems, including but not limited to “You Are Here” informational kiosks at key locations.</li> </ul>
TRA-4F	TAPS	Wayfinding systems.		TAPS did not complete a report for 2006-07.

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
TRA-5B	TAPS	Special-event parking management.	Completed - Ongoing	Based on the number of event parking permits sold, the campus hosted 265 events during 2007-08, serving approximately 60,300 people. Two major problem areas for night and weekend parking management were identified: 1) Event sponsors are not currently required to list their events in the online campus calendar. Campus units that don't list their events often impact the events of others (parking, traffic). Work began in 2007-08 to improve the campus calendar, making it easier to use, and triggering notification of the TAPS Event Parking Office for events over a certain size. 2) Lack of adequate parking capacity in the Performing Arts lot was exacerbated by the construction of the Digital Arts Facility; the construction staging area temporarily eliminated 30% of available parking spaces in that lot. TAPS Event Parking staff implemented a new procedure for handling overflow parking in that area, reducing the waiting time of those wanting to park, as well as the number of
TRA-5B	TAPS	Special-event parking management.		TAPS did not complete a report for 2006-07.
TRA-5C	TAPS	On-line parking permit sales and information.	In Progress	While directional maps and the Campus Calendar of events are available on-line, TAPS staff have not yet identified a secure means of issuing event-specific visitor parking permits. Systems currently available are either confusing and/or inconvenient for the customer, or easily counterfeited.
TRA-5C	TAPS	On-line parking permit sales and information.		TAPS did not complete a report for 2006-07.
TRA-5D	TAPS	Campus Events Calendar System for traffic and parking management.	Completed - Ongoing	1) Improvements have been made to the Campus Events Calendar system that a) improve the stability of the software and operating system, and b) enhance the user interface for visitors. As these "phase 1" improvements have been developed, implemented and tested, additional improvements have been identified for "phase 2" that enhance the user interface and effectiveness for event management staff and sponsors. 2) Phase 1 improvements have incorporated a system that notifies TAPS of the proposed scheduling of large events on the Campus Calendar. However, as noted elsewhere, the campus administration does not yet require sponsors to post their events to the Calendar system, resulting in some events going unposted (and TAPS failing to be notified). In general, however, these unreported events are believed to be relatively small in size. 3) TAPS Events staff have devised traffic and parking management plans on an as-needed basis for large events (including Move-In and Commencement), as well

**Table 2: Mitigation Status Detail 2006-2007**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
TRA-5D	TAPS	Campus Events Calendar System for traffic and parking management.		TAPS did not complete a report for 2006-07.
TRA-6B	TAPS	Fair share contribution to freeway facility improvements.	Not Triggered	This mitigation was not required in 2007-08.
TRA-6B	TAPS	Fair share contribution to freeway facility improvements.		TAPS did not complete a report for 2006-07.
TRA-6B-PB	P&B	Pay fair share of local cost of improvements to freeway facilities.	Not Triggered	There is no mechanism within Santa Cruz County for establishing and collecting fair share payments from projects that contribute to the need for freeway improvements.
UTIL-4	Physical Plant	Improve recycling and waste reduction.	Completed - Ongoing	<p>The following improvements in recycling and waste reduction programs were implemented over the past year.</p> <ul style="list-style-type: none"> <li>Increased number of and locations of receptacles for cardboard, mixed paper, mixed containers, metal, green waste and remodel construction debris.</li> <li>Program development for e-waste service.</li> <li>Outreach to students through CUIP programs through tabling, event booths, presentations, signs and hand-outs.</li> <li>Utilized the department owned roll-off truck service for capital project construction debris to track campus waste.</li> </ul> <p>See attached waste diversion table.</p>
UTIL-4	Physical Plant	Improve recycling and waste reduction.	Completed - Ongoing	<p>Improvements to the campus recycling and waste reduction programs included: increased staff by one FTE; developed and implemented a new series of dumpsters for mixed recycling allowing direct pick-up by large recycling trucks. Additionally, the Grounds roll-off-box service increased to pick up a larger percentage of campus and construction debris. By increasing staff and utilizing the mechanical advantage of heavy equipment, the percentage of material diverted from the landfill increased from 32.3% to 45.5%. Finally, the increased recycling infrastructure developed by campus housing helped capture a larger portion of the recycling stream.</p>
UTIL-9A-	CUHS	Water efficient washing machines in student housing.	Not Triggered	CUHS did not enter into a new contract for washing machines during 2007-2008.

**Table 2: Mitigation Status Detail 2006-2007**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9A-	CUHS	Water efficient washing machines in student housing.	Completed - Ongoing	<p>The University entered into a Laundry Services Agreement on July 1, 2002 for a term of three years. In January, 2005 the term was extended through July 1, 2007. On August 22, 2007 the term was extended through July 1, 2009. No options for extension remain.</p> <p>The specifications for laundry equipment included in the agreement state: The Laundry Equipment to be supplied shall consist of new electric commercial coin-operated metered automatic washing machines, 12 lb. or better capacity. All machines must be water saving and energy efficient.</p> <p>The washing machines used within current agreement are Maytag MAH21PD which are certified by the Consortium on Energy Efficiency 6 to have a water factor of 5.03</p>
UTIL-9A-	OPERS	Water-efficient washing machines.	Not Triggered	OPERS did not purchase washing machines in the past year.
UTIL-9A-	OPERS	Water-efficient washing machines.	Not Triggered	OPERS did not purchase washing machines in the past year. (information provided by Ryan Andrews, OPERS via email, Dec. 18, 2007)
UTIL-9A-	OPERS	Water-efficient washing machines.		OPERS did not purchase washing machines in the past year. Report provided by Ryan Andrews, Executive Director of OPERS, 911/09.
UTIL-9A-PP	Physical Plant	Leak detection and repair.	Completed - Ongoing	<p>At present there are no changes to the current campus leak detection and repair practices.</p> <p>(Leak detection system was described for 2006-07 as follows: On a monthly basis, Patrick Testoni, Campus Energy Manager, provides a chart that indicates water usage from all the points of city water entering Campus. The Campus water specialist and I (George Williams) compare, on a month by month basis, the usage. If there is an unexplained increase in any of the zones a visual inspection of the zone is conducted coupled with a leak detection contractor (Nor-Cal / Cruz Brothers) being called in to do a electronic sounding survey. After leak is found repairs are immediately scheduled and completed by an underground utility repair contractor (Granite Const/Geo. H. Wilson)</p>

**Table 2: Mitigation Status Detail 2006-2007**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9A-PP	Physical Plant	Leak detection and repair.	Completed - Ongoing	On a monthly basis, Patrick Testoni, Campus Energy Manager, provides a chart that indicates water usage from all the points of city water entering Campus. The Campus water specialist and I (George Williams) compare, on a month by month basis, the usage. If there is an unexplained increase in any of the zones a visual inspection of the zone is conducted coupled with a leak detection contractor (Nor-Cal / Cruz Brothers) being called in to do a electronic sounding survey. After leak is found repairs are immediately scheduled and completed by an underground utility repair contractor (Granite Const/Geo. H. Wilson)
UTIL-9A-PP	Physical Plant	Leak detection and repair.		At present there are no changes to the current campus leak detection and repair practices. (Leak detection system was described for 2006-07 as follows: On a monthly basis, Patrick Testoni, Campus Energy Manager, provides a chart that indicates water usage from all the points of city water entering Campus. The Campus water specialist and I (George Williams) compare, on a month by month basis, the usage. If there is an unexplained increase in any of the zones a visual inspection of the zone is conducted coupled with a leak detection contractor (Nor-Cal / Cruz Brothers) being called in to do a electronic sounding survey. After leak is found repairs are immediately scheduled and completed by an underground utility repair contractor (Granite Const/Geo. H. Wilson)
UTIL-9B-PP	Physical Plant	Pilot test high-efficiency plumbing fixtures.	Completed - Ongoing	Testing on low flow flush valves has taken place. The "Sloan Uppercut Dual Flush (1.1gpf up & 1.6GPF down)" for flush valve type/wall mount toilets has been inserted into the campus standards. Also the "Sloan Model 1000.1001-0.13 Manual H2O Flushometer and urinal (1/8 GPF)" has been added to the campus standards.
UTIL-9B-PP	Physical Plant	Pilot test high-efficiency plumbing fixtures.		Three Pilot Test programs have been completed; (1)The waterless urinal testing (2) The .08 gpf Zurn urinal testing and (3) The .5gpm restroom faucet aerator testing.  The waterless urinal has been rejected due to the less than cost effective replacement cartridge costs. The Zurn .08gpf urinal has been adopted into the Campus Standards in place of the waterless fixture.
UTIL-9B-	PP&C	Pilot test high-efficiency plumbing fixtures	Completed - Ongoing	See UTIL-9A regarding 1/8-gallon-per-flush urinals. Campus is also considering pilot testing 1.28 gpf flush valve toilets for new installation, and dual flush valves that are available for retrofitting 1.6 gpf toilets. (Information provided by Steve Paul, Campus Engineer)

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9B-	PP&C	Pilot test high-efficiency plumbing fixtures	Completed - Ongoing	<p>1. Urinals: Pilot testing of the Zurn Ecovantage 1/8 GPF (1 Pint) ultra low consumption urinal was completed with a decision to adopt the product as a campus standards. Campus Standards Campus Standard 15400 2.04 will be modified. The product has been incorporated in projects with urinals reaching the 100% CD phase over the course of the year.</p> <p>2. Flush Valve (Public Area) Toilets: Pilot testing of the Sloan Upper Cut Dual-Flush Flushometer with 1.6 GPF / 1.1 GPF manually selected flushes was completed with a decision to adopt the product into the Campus Standards. Campus Standard 15400 2.04 will be modified. The product has been incorporated in projects with flush valve toilers reaching the 100% CD phase over the course of the year.</p> <p>3. Tank Type (Residential Area) Toilets: Pilot testing of the Toto Eco Drake 1.28 GPF high efficiency tank tank toilet was completed with a decision to adopt the product into the Campus Standards. Campus Standard 15400 2.04 will be</p>
UTIL-9C	CUHS	Water conservation education program for campus residents.	Completed - Ongoing	<p>CUHS has provided educational materials to residents including campus entry banner, posters, table-tents, flyers, cling-on conservation reminders installed in residential bathrooms, and material provided to college newsletters, KZSC programmers, and City on a Hill press. The Resource Conservation Coordinator and CUHS-sponsored Green Campus Program students have held conservation tabling events at colleges and all-campus recreational events and new-student orientations.</p> <p>Facilities worked with Green Campus to include water conservation in two of their energy conservation projects. Mock utility bills were produced monthly with water usage and placed in five colleges and also provided to individual Crown Merrill Apartment residents. The second project was in person utility audits at Kresge East including a significant water conservation component.</p> <p>Silas Snyder, University Housing Services Facilities Resource Conservation Coordinator, is designated as the water conservation educator.</p>
UTIL-9C	CUHS	Water conservation education program for campus residents.	Completed - Ongoing	<p>CUHS has provided educational materials to residents including posters, table-tents, flyers and cling-on conservation reminders installed in bathrooms over the last year. The Conservation coordinator and CUHS-sponsored Green Campus Program students have held conservation tabling events at colleges and all-campus recreational events and new-student orientations.</p> <p>Working with Green Campus Program student interns, facility-specific water conservation contests were held over the last year at Merrill, Crown and Stevenson Colleges.</p> <p>Silas Snyder, CUHS Facilities Resource Conservation, Training, and Safety Coordinator, has been designated as a water conservation educator.</p>

**Table 2: Mitigation Status Detail 2007-2008**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9D	PP&C	Campus water audit.	Completed - No Further Action	Water audit was completed in 2007.
UTIL-9D	PP&C	Campus water audit.	Completed - No Further Action	Draft report was completed in September 2007. Draft final report was submitted by consultant in December 2007.
UTIL-9E-	CUHS	Implement water audit recommendations.	Completed - Ongoing	<p>During 2007-2008, a list of high priority water conservation retrofit projects based on the Maddaus water audit was generated by PP&amp;C. Projects were quantified and estimates of costs, including planning, project management, and contract work were included in the list.</p> <p>CUHS Facilities reviewed the list and identified projects that were already completed and projects that could be executed by Facilities staff in 2008-2009 and 2009-2010. Money was earmarked in the 2008-2009 budget to begin retrofit of toilets, showers and sink aerators, and to perform maintenance on low-usage fixtures that may not be operating to designed efficiency.</p>
UTIL-9E-	CUHS	Implement water audit recommendations.	Not Triggered	Water audit report was completed in September 2007. This mitigation was not triggered in the reporting year.
UTIL-9E-PP	Physical Plant	Implement water audit recommendations.	Completed - Ongoing	<p>The three 2009 priorities are: conduct a pilot test to see if .5GPM bathroom type faucet aerators will be acceptable for the campus community.</p> <p>Retrofit 30 PE Pool showerheads to 1.5 GPH flow rates.</p> <p>Retrofit 320 high use area bathroom faucets aerators.</p> <p>Three work orders have been generated, 1)pilot test .5 GPM aerators, 2) retrofit PE Pool showerheads, 3) retrofit high use faucet aerators. The faucet aerators and showerheads will be purchased by the beginning of March and installation will be by mid March 2009.</p> <p>Two additional projects slated for 2012 will begin after the 2009 priorities are completed. They are 1) Repair flapper valves on 1.6GPM tank type toilets in state areas).</p> <p>Repair 1.6GPF flush valves on wall mount type toilets in state areas.</p> <p>Design work to begin in 2009 for the retrofitting of the 3.5GPF wall mount toilets to 1.6GPF type flushometers.</p>
UTIL-9E-PP	Physical Plant	Implement water audit recommendations.	Not Triggered	Water audit was conducted in this reporting year.



**Table 2: Mitigation Status Detail 2008-2009**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9E-PP	Physical Plant	Implement water audit recommendations.		<p>Updated Progress status for the priorities listed below are as follows; 2008-2009'</p> <p>Completed:</p> <p>1) The (27) PE Pool have been retro-fitted from the 2.5gpm to the Bomar 1.5gpm shower heads</p> <p>2) The 320+ "High Use" restroom faucet aerators have been retrofitted to the .5gpm aerators</p> <p>3) The 500+ "Non High Use" restroom faucet aerators have been retrofitted to the .5gpm aerators</p> <p>Not Completed:</p> <p>4) The repair /replacement of OMP tank type toilet flappers has not begun. WO332023 has been generated. Work to take place before end of the year.</p> <p>5) The repair /replacement of OMP wall hung type 1.6gpf toilet flushvalve</p>
UTIL-9F	Physical Plant	Update water audit	Not Triggered	No action required in reporting year.
UTIL-9F	Physical Plant	Update water audit	Not Triggered	No action required in this reporting year.
UTIL-9G	PP&C	Water re-use feasibility study.	Completed - Ongoing	In fall 2007, the campus selected a consultant to conduct the study. The campus expects that the study will be complete by September 2008. (Information provided by Steve Paul, Campus Engineer)
UTIL-9H	CUHS	Retrofit plumbing fixtures in student housing within 5 years following approval of 2005 LRDP.	Completed - Ongoing	<p>CUHS Facilities participated in the Maddaus Water Management audit of its facilities.</p> <p>CUHS completed retrofit of all Stevenson College residential hall plumbing fixtures to current standard in Summer 2007. 81 toilets in 8 buildings were retrofit in this project.</p> <p>Retrofitting of Graduate Housing (4 Buildings) was completed in Summer 2008. Showers at the Crown/Merrill Apartment complex (92 units) were retrofit with 1.2 GPM showerheads.</p> <p>In the 2007-2008 reporting year, there are approximately 80 buildings with 595 toilets that remain to be retrofit with 1.6 gpf toilets.</p>

**Table 2: Mitigation Status Detail 2006-2007**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9H	CUHS	Retrofit plumbing fixtures in student housing within 5 years following approval of 2005 LRDP.	Completed - Ongoing	<p>CUHS completed retrofit of all Stevenson College residential hall plumbing fixtures to current standard in Summer 2007. 81 toilets were retrofitted in this project. Graduate Housing (total of 4 Buildings) is half way through the retrofitting process and will be completed in Summer 2008. Porter College (total of 3 buildings) will be fully retrofit in 2008-2009 as a part of a major capital renewal project. CUHS is in the planning stages of the retrofit of Merrill College residence halls/faculty apartments (5 buildings) and Kresge College/Kresge East Apartments (17 buildings.) Work is anticipated on these retrofits in 2009-2010. This will complete required retrofit work of CUHS facilities.</p>
UTIL-9H	CUHS	Retrofit plumbing fixtures in student housing within 5 years following approval of 2005 LRDP.		
UTIL-9I-	Arboretum	Water conservation in drought emergency	Not Triggered	City did not implement drought emergency measures during the reporting year.
UTIL-9I-	Arboretum	Water conservation in drought emergency	Not Triggered	<p>In 2006-07, the City did not declare a drought emergency, but did implement time-of-day restrictions for landscape irrigation. According to Arboretum staff, the Arboretum did not limit watering to the specified hours because the plants in the greenhouses would die if not watered. The Arboretum does not have an automatic irrigation control system, so workers would have had to work outside of their normal working hours to irrigate.</p>
UTIL-9I-	CASFS	CASFS reduce use of potable water for irrigation if City implements drought emergency measures.	Not Triggered	City did not implement drought emergency measures during the reporting year.

**Table 2: Mitigation Status Detail 2006-2007**

Mitigation ID	Unit	Mitigation Description	Status	Status Description
UTIL-9I-	CASFS	CASFS reduce use of potable water for irrigation if City implements drought emergency measures.	Completed - Ongoing	<p>The City did not declare a drought emergency in the reporting year. However, based on limited rainfall during the 06/07 rainfall season, the City of Santa Cruz implemented landscape water restrictions in 2007. These restrictions limited residential landscape water use to specific hours (no irrigation between 10:00 AM and 5:00 PM). Based on these restrictions, and the potential for shortages, the CASFS farm attempted to reduce water use during the 2007 cropping year by the following methods:</p> <ol style="list-style-type: none"> <li>1) Extensive use of drip irrigation</li> <li>2) Careful monitoring to determine water use frequency and application rates</li> <li>3) Very limited use of summer cover crops</li> <li>4) Very limited use of pre-irrigation as a weed control strategy</li> <li>5) Tillage in our pear orchard to minimize water loss (evapotranspiration) from non-tilled vegetation</li> </ol>
UTIL-9I-	CASFS	CASFS reduce use of potable water for irrigation if City implements drought emergency measures.		<p>The City implemented Stage 2 water use restrictions for May through October 2009, with a goal of reducing peak season water use by 15%. CASFS has complied with restrictions imposed on other similar users in the City service area. During the past year year, CASFS has installed seven flow meters at key points in the irrigation water system and will be installing two more over the next year. This will facilitate monitoring of water use in different zones, with the goal of educating the various irrigation managers about keeping water use to an absolute minimum.</p>
UTIL-9I-	CUHS	Require reduction in residential water use on campus if the City implements drought emergency management measures.	Not Triggered	<p>Over the past year, the City has not implemented drought emergency water reduction measures beyond Stage One watering restrictions (see Item 1.), or set reduction targets.</p> <p>CUHS has prepared curtailment plans and emergency notices to be distributed immediately to all residential and dining units should the City declare a Stage 2 or Stage 3 water emergency.</p>
UTIL-9I-	CUHS	Require reduction in residential water use on campus if the City implements drought emergency management measures.	Completed - Ongoing	<p>CUHS Grounds Keepers (Family Student Housing, Village, Grad Housing, and Camper Park), landscape contractors (Faculty Housing) and Physical Plant Grounds Keepers (the Colleges) who maintain CUHS areas have complied with City Stage 1 watering restrictions prohibiting automatic irrigation between 10 AM and 5 PM.</p>
UTIL-9I-PP	Physical Plant	Water conservation in drought emergency.	Not Triggered	<p>The City did not implement drought emergency management measures during the 2007-08 reporting year and the campus has not brought the well on-line. No reporting is required for this reporting year.</p>

**Table 2: Mitigation Status Detail 2006-2007**

<b>Mitigation ID</b>	<b>Unit</b>	<b>Mitigation Description</b>	<b>Status</b>	<b>Status Description</b>
UTIL-9I-PP	Physical Plant	Water conservation in drought emergency.	Completed - Ongoing	City did not declare a drought emergency during the reporting year but in 2007 the City restricted landscape watering to certain hours of the day. Grounds Services complied with these restrictions.