

Santa Cruz World Surfing Reserve
Reserve Stewardship Plan
Threat area: Trash and Marine Debris

Cowell's Beach				
Root Cause	Objective	Strategy	Actions	Outcomes
Local beachgoers	1) Reduce trash impact of local beachgoers on Cowell's Beach	Improve beach clean up results	Drive greater participation to local beach clean ups. Coordinate with Surfrider Foundation and Save our Shores to support ongoing clean up efforts	15% increase in volunteer participation in 2015
		Increase awareness among local youth beachgoers about negative impacts of trash.	Increase collaboration between O'Neill Sea Odyssey and Save Our Shores curriculum. Provide letters of support from WSR partners to increase existing funding and secure new funders	80% increase in local students who can participate in both curriculums by 2016.
Visiting beachgoers	1) Reduce trash impact of visiting beachgoers on Cowell's Beach	Improve beach clean up results	Drive greater participation to local beach clean ups. Coordinate with Surfrider Foundation and Save our Shores to support ongoing clean up efforts	15% increase in volunteer participation in 2015
Inadequate municipal waste services	1) Reduce amount of trash on beach resulting from inadequate waste services.	Reduce trash overflow at waste stations	Increase # of waste bins and increase frequency of waste disposal. Establish meetings with City Councilmembers, provide letters of support from WSR partners, and recommend interventions to Public Works.	50% reduction in overflow found around waste bins by 2016.
	2) Reduce impact of special events on waste services.	Encourage City of SC to adopt zero-waste practices as requirements for coastal event permits.	Encourage City of SC to adopt zero-waste practices as requirements for coastal event permits. Establish meetings with City Councilmembers, provide letters of support from WSR partners, and recommend ordinances to Dept. Parks and Rec.	Adoption of ordinances restricting waste at beach events and integrating stewardship measures by 2016.
Main Beach				
Root Cause	Objective	Strategy	Actions	Outcomes
San Lorenzo River	1) Reduce amount of trash in San Lorenzo River.	Improve river clean up results.	Drive greater participation to local river clean ups. Coordinate with Surfrider Foundation and Save our Shores to support ongoing clean up efforts	15% increase in volunteer participation in 2015
Visiting beachgoers	1) Reduce trash impact of visiting beachgoers on Mains Beach	Improve beach clean up results	Drive greater participation to local beach clean ups. Coordinate with Surfrider Foundation and Save our Shores to support ongoing clean up efforts	15% increase in volunteer participation in 2015
Inadequate waste collection services	1) Reduce trash overflow at Seaside Co. and City of SC waste stations	Increase # of waste bins and increase frequency of waste disposal.	Increase # of waste bins and increase frequency of waste disposal. Establish meetings with City Councilmembers and Seaside Co., provide letters of support from WSR partners, and recommend interventions to Public Works and Seaside Co.	50% reduction in overflow found around waste bins by 2016.
Seabright Beach				
Root Cause	Objective	Strategy	Actions	Outcomes
Local beachgoers	1) Reduce trash impact of local beachgoers on Seabright Beach	Improve beach clean up results	Drive greater participation to local beach clean ups. Coordinate with Surfrider Foundation and Save our Shores to support ongoing clean up efforts	15% increase in volunteer participation in 2015
		Increase awareness among local youth beachgoers about negative impacts of trash.	Increase collaboration between O'Neill Sea Odyssey and Save Our Shores curriculum. Provide letters of support from WSR partners to increase existing funding and secure new funders	80% increase in local students who can participate in both curriculums by 2016.
Fourth of July holiday crowds	1) Reduce amount of trash on beaches after 7/4 holiday.	Improve Star Spangled Beach clean up results	Drive greater participation to Star Spangled beach clean up. Organize WSR partners to participate and recruit volunteers on July 5th event.	15% increase in volunteer participation in 2015
Inadequate State Parks waste collection services	1) Reduce amount of trash on beach resulting from inadequate waste services.	Reduce trash overflow at waste stations	Increase # of waste bins and increase frequency of waste disposal. Establish meetings with elected officials, provide letters of support from WSR partners, and recommend interventions to State Parks.	50% reduction in overflow found around waste bins by 2016.

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Threat area: Sea Level Rise

Cowell's Beach					
Key Threats		Objective	Strategy	Actions	Outcomes
Loss of surf quality		Protect quality of surf at Cowell's Beach.	Quantify economic contribution associated with Santa Cruz's quality surf environment.	Undertake 'Surfonomics' economic valuation study. STW and MIIS jointly launch study.	Surfonomics data is cited in Local Coastal Plan by 2016.
			Support County ordinance to protect surf resources in climate change adaptation.	Introduce Santa Cruz County ordinance to safeguard the local surfing resources in sea-level response planning. Save The Waves Save will work with County Supervisor John Leopold to draft and introduce an ordinance to County Board of Supervisors.	County of Santa Cruz ordinance adopted by 2017.
Accelerated loss of sand at beach		Maintain current levels of sand at Cowell's Beach.	investigate beach nourishment strategies	Investigate feasibility, costs, benefits, and consequences of beach nourishment programs within the WSR. Work with Monterey Bay National Marine Sanctuary and local/state policymakers to study the potential for beach nourishment within the MBNMS.	Beach nourishment recommendations completed by 2017
West Cliff					
Key Threats		Objective	Strategy	Actions	Outcomes
Loss of surf quality		Protect quality of surf along West Cliff.	Quantify economic contribution associated with Santa Cruz's quality surf environment.	Undertake 'Surfonomics' economic valuation study. STW and MIIS jointly launch study.	Surfonomics data is cited in Local Coastal Plan by 2016.
			Support County ordinance to protect surf resources.	Introduce Santa Cruz County ordinance to safeguard the local surfing resources in sea-level response planning. Save The Waves Save will work with County Supervisors to draft and introduce an ordinance to County Board of Supervisors.	County of Santa Cruz ordinance adopted by 2017.
Accelerated loss of cliffs		Consider surf resources while responding to accelerated cliff erosion.	Influence Local Coastal Policy decision making.	Save the Waves Coalition, World Surfing Reserves and WSR partners will advocate for LSC representation in LCP committee. Submit letter of interest to Chair of Committee advocating for inclusion on committee.	Embed consideration of surf resources in the establishment of local coastal policies by 2017.
East Cliff					
Key Threats		Objective	Strategy	Actions	Outcomes
Accelerated loss of cliffs		Consider surf resources while responding to accelerated cliff erosion.	Influence Local Coastal Policy decision making.	Save the Waves Coalition, World Surfing Reserves and WSR partners will advocate for LSC representation in LCP committee. Submit letter of interest to Chair of Committee advocating for inclusion on committee.	Embed consideration of surf resources in the establishment of local coastal policies by 2017.
Loss of coastal access points		Consider surf resources while responding to accelerated cliff erosion.	Influence Local Coastal Policy decision making.	Save the Waves Coalition, World Surfing Reserves and WSR partners will advocate for LSC representation in LCP committee. Submit letter of interest to Chair of Committee advocating for inclusion on committee.	Embed consideration of surf resources in the establishment of local coastal policies by 2017.

Santa Cruz World Surfing Reserve
Reserve Stewardship Plan
Threat area: Water Quality

Cowell's Beach				
Root Cause	Objective	Strategy	Actions	Outcomes
Anthropogenic sources of bacteria (E.coli) - Sewer/Septic Infrastructure	1) Reduce anthropogenic sources of bacteria (E. coli) derived from sewer/septic infrastructure.	A) Improve septic and private lateral infrastructure	1. Investigate regulatory and incentives policy interventions to upgrade private laterals. Establish meetings with City Councilmembers, provide letters of support from WSR partners, coordinate with City of Santa Cruz to offer upgrade incentives.	Remove Cowell's from top of Heal the Bay list, by April 2015
			2. Investigate dry weather runoff diversion to the waste water treatment plant.	Remove Cowell's from top of Heal the Bay list, by April 2015
		B) Improve information flow and data sharing about Cowell's water quality to community.	1. Establish Santa Cruz Waves as data hub and information portal for Cowell's issue. Coordinate with Santa Cruz Waves team and WSR partners to provide the informational platform.	Data shared on Santa Cruz Waves by 2015
			2. Create warning area under wharf where water quality is most impacted. Work with County and city to implement based on WQ data.	Remove Cowell's from top of Heal the Bay list, by April 2015
	2) Improve understanding of sources of bacteria.	A) More source tracking investigation and monitoring sites.	1. Create a Cowell's Beach working group to meet regularly on the issue. Convene local stakeholder groups and establish regular meetings.	Group will meet at least once a quarter.
			2. Create branded #cleancowells campaign with STW, Surfrider, and, CWC. Use local media to communicate the issue and progress made.	Remove Cowell's from top of Heal the Bay list, by April 2015
		B) Streamline Cowell's interventions amongst key WSR partners for greater impact.	1. Support partners in conducting source tracking investigations.	Remove Cowell's from top of Heal the Bay list, by April 2015
			2. Establish additional water monitoring site in Cowell's surfing lineup. Work with County Env Health and Surfrider to collect and analyze data. Establish volunteer sampling protocol.	Remove Cowell's from top of Heal the Bay list, by April 2015
Human Waste	1) Reduce anthropogenic sources of bacteria (E. coli) derived from human waste sources.	A) Investigate policy interventions to reduce homeless encampment impacts to water quality.	1. Advocate for City of SC to offer free, 24 hour restroom facilities. Establish meetings with City Councilmembers and provide letters of support from WSR partners.	Remove Cowell's from top of Heal the Bay list, by April 2015
			2. Create options for intervention for illegal RV dumping.	Remove Cowell's from top of Heal the Bay list, by April 2015
	B) Improve coordination on Cowell's efforts with diverse community	1. Create a Cowell's Beach working group to meet regularly on the issue. Convene local stakeholder groups and establish regular meetings.	Group will meet at least once a quarter.	
		2. Support homeless service providers.	Remove Cowell's from top of Heal the Bay list, by April 2015	
Pet Waste	1) Reduce anthropogenic sources of bacteria (E. coli) derived from human waste.	A) Improve results of local 'poop bag' programs.	1. Educate pet owners about existing programs and benefits. Support outreach and education efforts of SOS, Surfrider, and SC City programs.	Remove Cowell's from top of Heal the Bay list, by April 2015
San Lorenzo River				
Anthropogenic sources of bacteria (E.coli) - Sewer/Septic Infrastructure				
Anthropogenic sources of bacteria (E. coli) derived from sewer/septic infrastructure.	1) Reduce anthropogenic sources of bacteria (E. coli) derived from sewer/septic infrastructure.	A) Improve septic and lateral infrastructure	1. Evaluate policies to upgrade sewer/septic lines with transfer of ownership. Establish meetings with Board of Supervisors, provide letters of support from WSR partners, and introduce recommendations to County Planning Dept.	Policy recommendations completed by June 2015.
			2. Push for requirements to upgrade septic and laterals. Establish meetings with City Councilmembers, provide letters of support from WSR partners, coordinate with City of Santa Cruz to offer upgrade incentives	At least one major upgrade made to sewage infrastructure by 2017.
	B) Build government support of San Lorenzo River Alliance.	3. Enlist City of SC in San Lorenzo River Alliance. Greg Pepping to meet with Councilmembers and advocate for City membership.	MOU between City and SLRA signed - COMPLETED!	
		4. Support partners in conducting source tracking investigations. Apply to CBI	Awarded application from CBI, by Dec 2014	
Human Waste	1) Reduce anthropogenic sources of bacteria (E. coli) derived from human waste.	A) Reduce impacts from homeless encampments along San Lorenzo	1. Advocate for City of SC to offer free, 24 hour restroom facilities. Establish meetings with City Councilmembers and provide letters of support from WSR partners.	24 hour facilities agendized by city council, by 2016
			2. Support homeless service providers.	At least 2 homeless services agencies contacted by 2016.