NOAA FISHERIES SERVICE

Southwest Fisheries Science Center

Green roofs and landscaped plazas - Gould Evans

La Jolla Laboratory Replacement Project

Photovoltaics - Gould Evans

Leadership in Energy and Environmental Design (LEED) Certification

http://swfsc.noaa.gov

SWFSC's La Jolla Laboratory will be LEED Gold-certified

Developed by the U.S. Green Building Council in 2000, LEED (Leadership in Energy and Environmental Design) provides a framework for quantifying a building's green features based on sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. The NOAA building expects to receive enough credits for a Gold certification, joining only a handful of other LEED Gold-certified buildings in San Diego.

LEED certification makes business sense

The energy efficient features of the new NOAA building will provide approximately 28% annual cost savings in operating costs (estimated at $119,000/year) above the standard that LEED has adopted from ASHRAE (American Society of Heating, Refrigerating & Air Conditioning Engineers).

Preliminary estimates of the SWFSC La Jolla Laboratory's LEED credits

Sustainable Sites - 10 of 14 possible credits for:
Choosing a site which avoids sensitive habitats and is close to public transportation; providing bicycle storage and changing rooms; designating parking places for electrical car charging stations, low-emitting vehicles and car/van pooling; vegetating with native or low-water use plants; implementing a storm-water management system; limiting the “heat island effect” through reflective roofing, vegetated roofs and limiting paving.

Water Efficiency - 3 of 5 possible credits for:
Efficient irrigation systems reduce potable water consumption by 91.3% while inside, water use reduction measures, such as low flow plumbing fixtures, reduce potable water use by 45% compared to national baselines established by the U.S. Green Building Council.

Energy and Atmosphere - 11 of 17 possible credits for:
Optimizing energy performance (30% better than the national baseline); offsetting 7.7% of the energy cost of the construction through renewable energy generated on-site; conducting on-site performance testing of all mechanical systems prior to full operation; using no refrigerants such as chloroflourocarbons and minimizing emission of compounds that contribute to ozone depletion.

Materials and Resources - 6 of 13 possible credits for:
Diverting 75% of construction waste from disposal in landfills; using 10% regional and 20% recycled materials; and sourcing 50% of the wood from certified, responsibly-managed forests.

Indoor Environmental Quality - 12 of 15 possible credits for:
Monitoring outdoor air delivery; reducing indoor air quality problems during construction; using low emitting paints and materials; and providing individual control of lighting and temperature.

Innovation and Design Process - 5 of 5 possible credits for:
Additional points were awarded because NOAA will provide a Green Building Education Program and implement a Green Cleaning Program; the building achieved exemplary performance in its water efficiency and reduction in the heat island effect; and LEED accredited professionals were involved throughout the project's design and construction.