



April 11, 2007

Diane Livia
California Coastal Commission
45 Fremont Street, Ste 2000
San Francisco, CA 94105

Re: Monterey Bay Aquarium Research Institute, Benthic Rover Deployments, Federal Consistency Certification Request

Dear Diane:

Previously MBARI received permission from the California Coastal Commission to deploy an instrument called the Benthic Rover as a platform to be used by Dr. Ken Smith to collect data about the benthic environment in federal waters in Monterey Bay (see attached correspondence). The permission was granted for specific deployments that occurred last year. At the time, you suggested that MBARI submit a request to the CCC for a Federal Consistency Certification to allow future deployments without having to seek permission prior to each deployment. I am writing now to provide additional information about potential future deployments and to seek such permission from your agency. We have already obtained a permit from the Monterey Bay National Marine Sanctuary for these deployments (also attached).

As you may recall, the Rover was deployed in July and December of 2006 to conduct engineering tests. I have just received an updated description of future deployment plans from the project team. All deployments will be in the same vicinity as previous deployments, which were located at approximately N 36.71136, W 122.18681 (see map below). Here are additional details:

May 21-29, 2007 (8-day Rover deployment at Smooth Ridge, ~1000m)

This is an engineering test dive during which the Rover will visit up to 6 sites, each 10m from the previous site. At each site, the Rover will conduct respirometry experiments. Respirometry measurements are achieved by inserting a small (~30cm) cylindrical chamber into the sediment and measuring the change in oxygen saturation over time. We will use ROV observation on May 21 to monitor the Rover's operation. The drop weight will be recovered by an ROV.

Aug 27–Sep 10, 2007 (14-day Rover deployment at Smooth Ridge, ~1000m)

This is an engineering test dive during which the Rover will visit up to 12 sites, each 10m from the previous site. At each site, the Rover will conduct respirometry experiments. We will use ROV observation on Aug 27 to monitor the Rover's operation. The drop weight will be recovered by an ROV.

Nov 7–Nov 26, 2007 (21-day Rover deployment at Smooth Ridge, ~1000m)

During this deployment Rover will visit up to 18 sites, each 10m from the previous site. At each site, the Rover will conduct respirometry experiments. We will use ROV observation on Nov 7 to monitor the Rover's operation. The drop weight will be recovered by an ROV.

Early Jan 2008 Short Rover deployment to test any features added to enable the Rover to plug into MARS. This deployment will still be autonomous (not connected to MARS).

Winter–Spring 2008 The plan is to deploy the Rover on MARS. (Deployment on MARS will be handled via a separate request, so we are not seeking permission here. However, please let me know if you think it can be covered as part of this request, and I can try to obtain more information.)

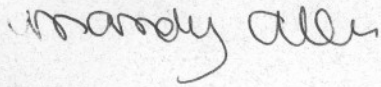
Please note that the dates provided are subject to change due to unforeseen circumstances, such as weather, mechanical issues, etc. Also, the ship schedule and project budgets are not available for next year yet, so any dates/details for deployments to occur next year are unknown. The project team may conduct further autonomous deployments next year, but other than what is listed, they do not have any set plans at this time.

As mentioned in our previous correspondence about this piece of equipment, the Rover provides an autonomous platform from which to conduct a diverse series of measurements at the deep-sea, sediment-water interface for extended periods of time. These measurements include sediment community oxygen consumption, megafauna density and movements, and bottom current flow. These deployments are needed to continue testing of systems and to gather scientific data in the process.

The dimensions of the Rover are approx 8' x 6'. The Rover runs on tracks, not wheels (see images below). It travels at a very slow rate, about 2 meters/minute. The Rover only weighs about 150 pounds in water with the drop weight. The weight is distributed across a large footprint, so it leaves a very slight impression on the seafloor. Any trace would likely be rapidly covered by natural sediment movement across the seafloor. The Rover can only move on flat surfaces, and it will only be deployed on sand/mud substrate. It cannot operate on rocky, hard bottom substrate and will not be deployed in such a location. Therefore, impacts should be minimal. Because the instrument will be recovered at the end of the deployment, the seafloor should rapidly return to its previous condition.

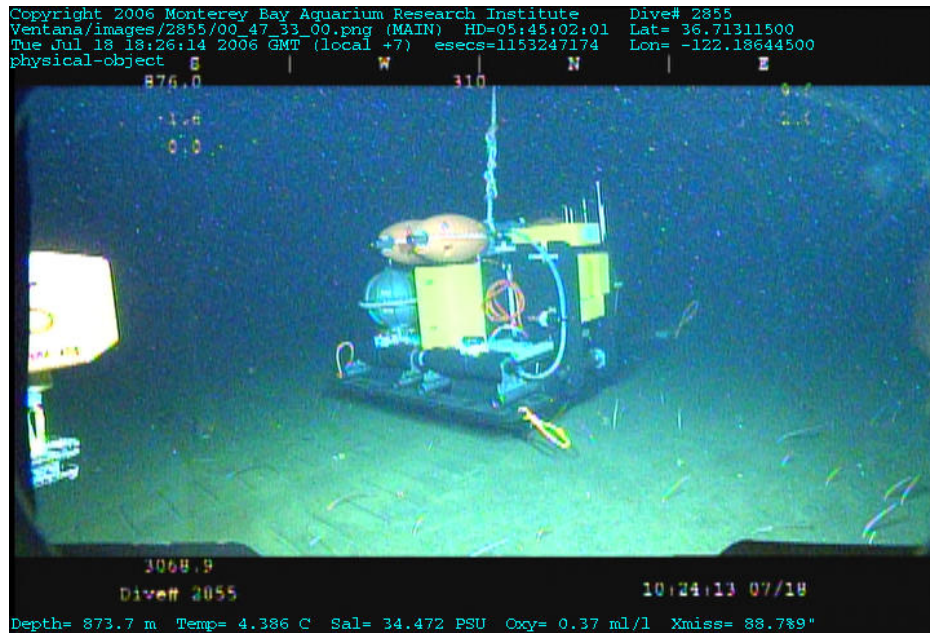
We greatly appreciate the assistance we have received from the CCC on this and other projects. MBARI is committed to working closely with the CCC staff to ensure compliance with the California Coastal Management Program (CCMP). Based on the above information, we have concluded that the proposed project complies with CCMP policies. Additionally, we ask that the CCC concur with our findings. If you need additional information, please do not hesitate to contact me at (831) 775-1885.

Sincerely,

A handwritten signature in cursive script that reads "Mandy Allen".

Mandy Allen
MBARI Operations Administrator

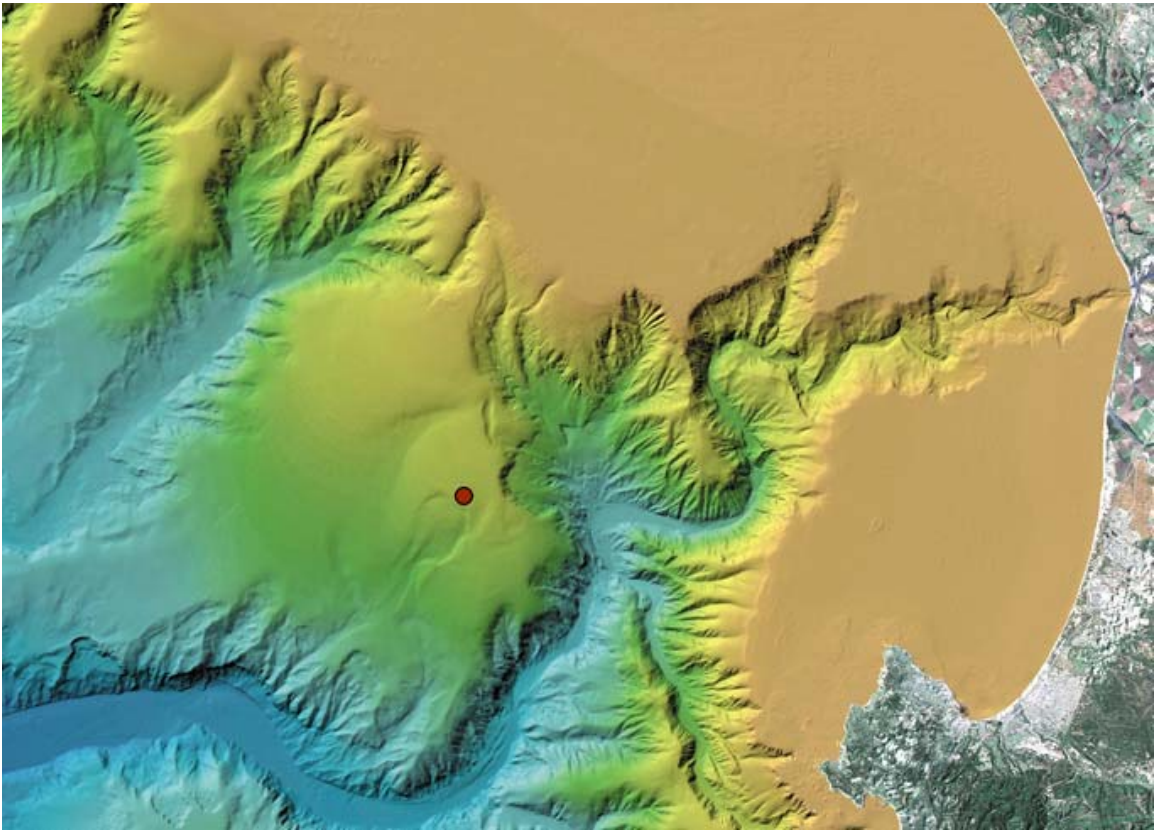
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Rover on the seafloor.



Drop weight recovery. Rover tracks can be seen on either side of the weight. These minimal tracks are expected to disappear quickly due to bottom currents.



Approx. location of previous and currently proposed Rover test deployments.