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ShoreZone mapping gives big picture view of coast

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Want to see the Cook Inlet coastline?

Sure, you could set out by kayak, and return home months later with muscles like cottage cheese.

You could charter an airplane or helicopter and kiss 10 years of permanent fund dividends goodbye.

Or, you could log on to www.coastalaska.net, and using information from the Cook Inlet Regional Citizens Advisory Council ShoreZone Mapping Project, take a video tour of all of Cook Inlet, the Outer Coast, Katmai, Kodiak and even the Aniakchak Coast on the Alaska Peninsula.

The ShoreZone Mapping Project is a collaboration between **CIRCAC**, the Exxon Valdez Oil Spill Trustee Council, the Kenai Peninsula Borough and the National Park Service. Using a technique pioneered by John Harper of Coastal and Oceans Resources Inc. of Sydney, British Columbia, Canada, ShoreZone creates a large-scale view of Cook Inlet and other areas, said Susan Saupe, **CIRCAC** science coordinator. By large-scale, she means large-scale, as in flying along the coast in a helicopter.

"What you can realistically map at 300 feet at 60 knots," Saupe said.

It's not streaming video < more like stuttering video < but by logging on to Gulf of Alaska Coastal Imagery page of the Coast Alaska Web site, you can actually see the coast as flown by Saupe and Harper over several weeks. Following the directions of a map viewer, and marking the starting point of a flight path starting at, say, Diamond Creek, an animation tool starts a video of the trip. "Fasten your seat belt," the instructions say.

The video can be sped up, slowed down, stopped, reversed and moved forward. Snapshots of individual frames can even be taken, Saupe said, with exact latitude and longitude. A corresponding map shows the flight path along the coast.

Stephen Howell, public outreach specialist for **CIRCAC**, conducts a workshop from 3:45 to 5 p.m. today in the Homer High School computer lab for teachers wanting to learn how to use the Coast Alaska Web site. He'll do a second workshop from 7 to 9 p.m. Sept. 15 at the high school.

Later tonight at about 8:15 p.m., Saupe talks about the ShoreZone mapping research for the Center for Alaskan Coastal Studies CoastWalk kickoff.

The Coastal Imagery Site allows planners, scientists, government officials and citizens a fast and easy way to see much of Southcentral Alaska's coastline.

"Some areas of Alaska are next to impossible to see any other way," Howell said.

The obvious use is for oil-spill response planning and prevention, Howell said.

ShoreZone mapping isn't just about images, though. Harper went along with Saupe on their flights along the coast, and as they flew, Harper, a specialist in land forms, or geomorphology, gave a running narrative of what he saw as the video camera rolled. At the same time, Saupe provided a narrative of biological zones. Later, using video and sound editing equipment, Harper referenced the narratives with the video map of the coast.

The final result? A large-scale map showing features such as wave exposure, wetlands, sedges and zones of blue mussels, ribbon kelp, eelgrass and bull kelp. The zones are shown as line segments along the coast. The maps don't show such things as species within a zone.

"It's more 'What are the major habitats? What are the major substrates?'" Saupe said.

Saupe said the videos were filmed on minus tides. On each tide they could get about four hours of flying time, with about four to five days of flying on each set of minus tides.

To keep from clogging the bandwidth pipe with huge files, the videos are not continuous, but animations consisting of snapshots taken about one of every 29 frames.

"There's nothing like actually seeing a picture of it," Saupe said. "If you can pull up a Web site < even visually, it would be useful."

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