Ocean Sciences Bowl flushes out young scientists
Seward’s NOSB team: back, from right; Isabel Barnwell, Alex Ashford, team captain, Maranda Clark. front row Kara Knotek, Josephine Braun, coach Carlyn Nichols.

Twenty-four teams from across Alaska competed in the 2013 Alaska Tsunami Ocean Sciences Bowl at Seward High School over the weekend. Except for a team from South Anchorage, who did to attend due to their district’s weather concerns, teams traveled across Alaska in a snow blizzard to get here. One team travelled from as far away as Scammon Bay, a rural village on the west coast of Alaska, about a mile from the Bering Sea, and another came from Kotlik, 35 miles northeast of Emmonak on the Yukon-Kuskokwim Delta.

About 127 residents and marine science professionals from across the state volunteered for this Alaska contest that Seward always hosts. There were runners, timers, coaches, judges, score-keepers, moderators and food preparers and servers. All were pleased to heartily welcome and support these young teenagers who share their passion for marine science and environmental stewardship, and who will one day be attending their university classes or competing for their jobs and research grants.

Icicle Seafoods Inc ., handed out five scholarships worth $5,000 apiece to attend UAF to some promising marine science majors.

“As usual, all of the students were very enthusiastic and positive. But we always have good kids that come to this,” said NOSB Regional Coordinator Phyllis Shoemaker. “More teams than ever before participated, and more teams did the research project than ever before instead of just coming for the quiz bowl,” she said.

The students’ grit was evident throughout the three-day event. Nels Evens, a Petersburg High School student suffering from a high temperature and other early flu symptoms participated from home via Skype so as not to let his other team members down during their research project presentation on the effects of proposed mining on the Stikine River Estuary.
Seward’s team, Don’t Say No to Coho, consisting of Alex Ashford, Isabell Barnwell, Kara Knotek, Josephine Braun and Maranda Clark did not have the challenge and expense of having to travel. But their time and energy for NOSB preparation was stretched thin by team members also having participated earlier in the week at the school’s Drama Debate and Forensic’s team competition and the Battle of the Books challenge, said their proud coach Carlyn Nichols.

The amount of preparation required to participate was considerable. Teams participated in a variety of difficult quiz bowls against the other teams, demonstrating their knowledge of the marine sciences, biology, geography, forecasting, treaties, and national and international bodies governing various species, and more. But unlike most other states’ NOSB challenges, which focus on the quiz bowls, each Alaska team is also encouraged to create and present an original written research project as half of their final grade.

This year they had to choose a valuable resource or product of an Alaskan estuarine system and develop a plan for implementing the management of that resource, keeping the estuary’s health a top priority. Then they had to present an oral Power-Point summary of their project, followed by questions before an audience of their peers and judges in the scientific community.

Many of the student research projects had constructive, cutting-edge proposals for better methods of resource management to offer the adult world in which they live, unobstructed by obstacles such as agency shortfalls, budget shortfalls and politics.

Kodiak’s team suggested ways to try to restore the much diminished sockeye salmon runs in Karluk Lake by creating a plankton hatchery, growing them with CO2 and sunlight, and feeding the healthy zooplankton back into the lake, river and lagoon.

The team from Dillingham did their oral presentation on how their town could build a plant to recycle some of the fish waste coming from Peter Pan cannery, turn it into fish meal and fish oil, and sell it locally to replace the costly use of diesel fuel, garden fertilizer and sled dog food.

A team from Petersburg looked at the many potential detrimental effects of proposed copper and other forms of proposed mining by a Canadian-owned company on the Stikine River Estuary, and the lucrative Alaska fisheries downstream that could be impacted.

Seward’s team was concerned about the almost nonexistent numbers of wild coho salmon left in Resurrection Bay compared to the hatchery-stocked coho, and they argued for trying to restore the wild population to former levels. In their research project, “Resurrection Bay Wild Coho Salmon in Potential Danger,” the students reasoned that while hatchery-bred fish may serve Seward’s tourist-based fishing industry well, those salmon are not only not as healthy or hearty as wild coho, but they cost us about 50 cents per smolt. There’s really no need to be so heavily dependent on hatchery production when with proper care of the environment, wild coho salmon runs can be restored, they said. They proposed to solve the problem by lessening the amount of stocked salmon, promoting and providing healthy spawning grounds and adding more regulations on culverts.

The idea of reducing Seward’s reliance on hatchery-bred salmon may raise eyebrows locally as that approach is at odds with enthusiasm on the part of Seward’s City Council and Chamber of Commerce who are currently executing plans to increase the amount of stocked salmon fry this year and in future years to help boost a few years of relatively low silver returns.
Taking first place was a team from Juneau-Douglas high school called Team Pogonophoraphobia. It was one of three teams participating from Juneau. A Juneau team has won the competition for the past seven years. A team from Mat Su Career-Technical high school called the Mat-Tsunamis placed second. Petersburg’s Omnipotent Octopi was third. Seward’s Don’t Say No to Coho team came in 11th, above the middle of the pack.