SEASIDE SCHOOL DISTRICT 10

CANNON BEACH • GEARHART • SEASIDE

BOARD OF DIRECTORS Steve Phillips, Chair Mark Truax, Vice-chair Tom Maltman Patrick Nofield

Dr. Hugh Stelson Brian Taylor Lynn Ulbricht

July 17, 2015

ADMINISTRATION

Dr. Doug Dougherty, Superintendent Justine Hill, Business Manager

Jeremy Catt, Director of Special Services

1801 South Franklin Street Seaside, OR 97138 Phone (503) 738-5591 Fax (503) 738-3471

Kevin Cupples City of Seaside Director of Planning 1387 Avenue U Seaside, OR 97138

Dear Mr. Cupples:

This letter is to confirm Seaside School District's need for an additional 40 acres of institutional land to be added to the City of Seaside's urban growth boundary. This need is easily within the City's 20-year horizon.

As you know, I commissioned DOGAMI to research and determine a safe elevation for a new school campus based on science; including historic local tsunami inundation levels and coastal shelf anomalies. Tsunami geologist George Priest and paleoseismologist Rob Witter were the principal researchers of the study^{1,2}. Oregon State University geophysicist Chris Goldfinger and DOGAMI geotechnical engineer Yumei Wang also provided additional information for us.

The results of our study were so significant that DOGAMI remapped the tsunami inundation elevations and created new evacuation areas for the entire Oregon coast. DOGAMI is in the process of recommending that that the Legislature increase the tsunami inundation zone line from 38 feet to 70 feet in elevation.

As a result of this study, Dr. Priest and Dr. Witter strongly recommended that Seaside School District site its schools on property that has an appropriate slope, will not liquefy during an earthquake, and is at least 80 to 100 feet in elevation. Unfortunately, there is no appropriate land that meets these recommendations within the urban growth boundaries of Seaside, Gearhart, or Cannon Beach.

Weyerhaeuser owns the hillsides to the east of the city and worked with Seaside School District to find land that most appropriately met the DOGAMI requirements. Seaside School District hired teams of geologists, engineers, and architects and worked with representatives from DLCD and the City of Seaside. Collectively, we considered the future needs of Seaside School District. To support this effort, the District conducted core drillings and other evaluations to find 40 contiguous acres for the new school campus. From this work, it was believed that the land directly east of the current Seaside Heights Elementary School is the best property on which to build a new campus. Because of this, Weyerhaeuser held this property out of the sale to the Campbell Group.

At the same time, Seaside School District commissioned a facilities evaluation that showed the existing buildings are in need of at least \$30 million of basic maintenance and repairs. This work, even if completed, would not address the current seismic code requirements, nor would it move the schools out of the tsunami inundation zone. These schools were also evaluated and determined to have a high potential for catastrophic seismic collapse³. Typical tsunami wave heights occurring in the Pacific Ocean have been 20 to 65 feet at the shoreline. However, because of local conditions, a few waves have been much higher – as much as 100 feet⁴.

Dr. Goldfinger's research found that there have been at least 41 Cascadia Subduction Zone earthquakes over the past 10,000 years. On average, the recurrence interval is approximately 244 years. A full rupture of the entire Cascadia subduction zone occurred in almost half of these. It has been 315 years since the last Cascadia event so the Oregon coast is well within the window of possibility.

This is why there is an immediate need to relocate our schools. The District does not intend to wait to ensure the safety of its students, and, indeed, it cannot. Even though the previous bond attempt was unsuccessful, Seaside School District anticipates placing a new school campus bond on the ballot within the next five years. For this reason, I ask you to include 40 acres of institutional property east of Seaside Heights Elementary School.

Sincerely,

Douglas C. Dougherty, Ph.D. Superintendent of Schools

cc: Kelly Hossaini Don Hanson

¹ George R. Priest, Chris Goldfinger, Kelin Wang, Robert C. Witter, Yingling Zhang, Antonio M. Baptista, <u>Tsunami Hazard Assessment of the Northern Oregon Coast: A Multi-Deterministic Approach Tested at Cannon Beach, Clatsop County, Oregon, DOGAMI Special Paper 41, 2009.</u>

² Robert C. Witter, <u>Prehistoric Cascadia Tsunami Inundation and Runup at Cannon Beach</u>, Clatsop County, Oregon, DOGAMI Open-File Report 0-08-12, 2008.

³ DOGAMI Report to the 74th Oregon Legislative Assembly, <u>Statewide Seismic Needs Assessment: Implementation of Oregon 2005 Senate</u> <u>Bill 2 Relating to Public Safety, Earthquakes, and Seismic Rehabilitation of Public Buildings, DOGAMI Open File Report 0-07-02, 2007.</u>

⁴ <u>Tsunami Evacuation Map: Cannon Beach and Arch Cape Areas, Oregon</u>. DOGAMI publication, 2008. http://www.oregongeology.org/pubs/tsubrochures/CannonEvac.pdf.