

October 18, 2015

**The Mayor & Council
District of Central Saanich
By email**

Re: Super El Nino - Contingency plan for emergency sea wall repair at Island View Beach

In September a major study was released warning of a severe El Nino weather pattern this winter and spring that has the potential to severely erode and flood Island View Beach.

Should the Island View Beach sea wall or natural berm be breached in a storm, there would likely be significant and costly damage to public and private property, and the Tsawout lands and RV park.

The last major flood was in 1987. That showed that a small breach of the sea wall will quickly become an unstoppable washout unless it is contained as soon as it occurs.

We recommend the District put in place a contingency plan to provide for immediate repairs should the sea wall or natural berms be breached.

We attach background material for those wishing more detail.

Yours truly,

The Friends of Island View Beach
By email from FriendsOfIslandViewBeach@gmail.com

c.c. CRD Regional Parks Committee
Lynn Wilson, Park Planner, CRD

Contingency plan for emergency sea wall repair at Island View Beach

Background:

In September 2015 a major study was released that spoke of a potential major El Nino weather pattern this year. The Peninsula News Review reported on this in their September 25, 2015 edition at <http://issuu.com/blackpress/docs/i20150925044920582?mobile=true> The article identifies Island View Beach as especially vulnerable, saying:

On the Peninsula, low lying sandy beaches such as Island View Beach, Cordova Spit and the stretch along Cadboro Bay by the low bluffs could be areas more severely affected this winter.

"In a season like this where we have our normal tides and even storms ... these will have a higher impact on the beach. In terms of erosion management and flood potential, there's a greater potential this year for those reasons," said Walker, coauthor of the study published ... in Nature Geoscience.

Island View Beach is approximately 300 acres of low lying land and in the ordinary course is protected from sea flooding by a mix of natural berms and low man made sea wall.

There would likely be significant and costly damage to public and private property and the Tsawout lands and Oceanside RV Park from sea water flooding should there be a major breach of the sea wall or natural berms. The public lands include the District roads (Island View & Homathko), the municipal ditches, the District park and the CRD park. The private lands at risk include the Michell farm lands, the former Hancock property, the residential housing on Island View Beach Estates and Highcrest Terrace; and Puckle Farm. Also at risk are the Tsawout lands and Oceanside RV Park. There are no barriers between these properties so flooding one will flood all.

Our web site at <http://www.friendsofisolandviewbeach.com/howeasilyflooded.html> shows how quickly these flat lands can be flooded. The most recent was in January 2014 when the 32" flapper gate on the District/CRD park failed. It also has details on previous floods including the most recent breach of the berm in 1987, when it was described as: "**... the water broke through the dike at about 7:30am. The leak widened from a trickle into a surging channel and by mid-afternoon the water had broken down an opening about 150 metres wide.**"

What the flooding of 1987 demonstrated is the need for immediate action if the berm or sea wall is breached. Once that happens there is no time to begin discussions about who is doing what and when, because the flooding – and the consequential damage – will happen so quickly. The urgency is greater now because of the new housing at Island View Beach Estates. In a previous flooding from a breach of the sea wall, Vern Michell saw waves breaking on the slope where those houses are now.

We believe the District is best equipped to play the lead role. Your works yard is relatively close; you have the equipment and experienced crews, and the District is a major stake holder. District staff are experienced and will be able to put forward solutions. A process that occurred to us would be:

- To obtain pre-approval from the shoreline property owners for the District to be able to enter their lands in the event of a breach of the berm, and undertake repairs.
- Post notices in the area giving a phone number for the public to contact if any of the berms are breached

- If a bad storm season appears to be developing, consider stockpiling rock at the beach so no time is lost looking for material if sea wall or berm is breached.

Photos of the area follow here

At the Central Saanich park, looking west across the flats to the housing on Island View Beach Estate



Showing the position where the photo above was taken, and how the flooding then reached the slope where there is now housing at Island View Beach estates and other sites.



The north end of the Island View Beach flat lands – showing the CRD Park, Puckle Farm, the Tsawout lands, and Oceanside RV Park. This land is completely flat from the Michell lands in the south to the Tsawout lands in the north. Flood one area and all are flooded.



Ground level photo of the same area, showing how flat the land is.



The Highcrest Terrace housing, taken from inside the CRD park



The Michells farm fields in the south, flooded with salt water in January 2014 when the CRD/Central Saanich flapper gate broke



The flooding of island View Beach in 1987

DEC 16 1987

Farmer suffers setback as salt-water floods land

By Grania Litwin
Times-Colonist staff

Close to 20 hectares of Central Saanich farmland as well as most of the Capital Regional District park at Island View beach were flooded with sea-water Wednesday when a CRD dike washed out.

And farmer Vern Michell is blaming the CRD for the mess, which he said could cost him \$40,000 in lost crops alone.

"We have been working for the past 25 to 30 years to get the salt water out of this land, to flush it clean," said Michell, who farms at 3047 Island View Rd.

"This accident has set us back at least 20 years. On top of that, we may lose production from these acres for perhaps the next five years.

"I have 20 acres (eight hectares) flooded, and the farm just north of me has about the same. The regional park is totally flooded, except for some high ground."

Michell said the water broke through the dike at about 7:30 a.m. The leak widened from a trickle into a surging channel and by mid-after-

noon the water had broken down an opening about 150 metres wide.

He said the area is exactly where a break in the dike appeared last December. At that time the municipality of Central Saanich dumped several truckloads of fill, including tree stumps which help hold the sand, into the gap and stemmed the flood.

"I have only praise for those guys, they reacted real quick because of the urgency."

But Central Saanich engineer Al Mackey said Wednesday the CRD thought the raised area looked unattractive.

"We used stumps and clay and whatever material we could get hold of fast, but they slapped our wrists about it."

"Initially they wanted us to remove it all, but we met on site and agreed to tidy it up. Stumps were removed and burned and the resulting berm was lower than the original."

Michell said the flooded area is "excellent farmland, ideal for growing lettuce and beets."

"Because it is close to the ocean the land does not have extremes of

temperature and yet the moisture level is high," he said.

"Now the whole area is polluted."

He said his drainage system is also a shambles.

"It is full of logs and debris. There are 30- and 40-foot (nine- to 12-metre) logs floating in the main ditch. I can hardly believe it."

"I don't know what they can do now. Everything is washed into the fields and the access road is three feet under water."

He said quick drainage of the field is the only way to save the agricultural viability of the land.

"If the water evaporates all the salt will be left there."

Michell would not comment on whether he plans to sue the CRD for the damage.

CRD parks administrator Ramon Herrick said Thursday afternoon she was just heading out to survey the flooding.

Said Mackey: "I couldn't even hazard a guess as to how much it might cost to repair the damage. The municipality will certainly get in there as soon as possible to open up the main outlet."



■ RAY LAMONT and Vern Michell look at CRD parkland where berm has been breached.

John McKay photo

Flooding of Island View Beach in the 1950's

