



AGENDA – Monday, April 16, 2018

6:15 p.m. Workshop

7:00 p.m. City Council Meeting

Long Beach City Hall
115 Bolstad Avenue West

6:15 WORKSHOP

WS 18-07	Not a Ban a Better Plan-Update – TAB A
WS 18-08	Peninsula Sanitation – Recycling – TAB B

7:00 p.m. CALL TO ORDER; PLEDGE OF ALLEGIANCE; AND ROLL CALL

Call to order	Mayor Phillips, Council Member Linhart, Council Member McGuire,
And roll call	Council Member Murry, Council Member Cline & Council Member Kemmer.

PUBLIC COMMENT

At this time, the Mayor will call for any comments from the public on any subject whether or not it is on the agenda for any item(s) the public may wish to bring forward and discuss. Preference will be given to those who must travel. **Please limit your comments to three minutes. The City Council does not take any action or make any decisions during public comment.** To request Council action during the Business portion of a Council meeting, contact the City Administrator at least one week in advance of a meeting.

CONSENT AGENDA – TAB C

All matters, which are listed within the consent section of the agenda, have been distributed to each member of the Long Beach City Council for reading and study. Items listed are considered routine by the Council and will be enacted with one motion unless a Council Member specifically requests it to be removed from the Consent Agenda to be considered separately. Staff recommends approval of the following items:

- Minutes, April 2, 2018 City Council Meeting
- Payment Approval List for Warrant Registers 57764-57796 & 83230-83314 for \$234,256.04

BUSINESS

- **AB 18-29 – Special Use Permit 2018-05 Tye Caldwell – TAB D**
- **AB 18-30 – Small Works Roster Agreement with MRSC – TAB E**

DEPARTMENT HEAD ORAL REPORTS

CORRESPONDENCE AND WRITTEN REPORTS – TAB F

- Wastewater Department Report for March 2018
- Water Department Report for March 2018
- Thank You Letter
- Police Chief's Report for March 2018
- Senate Bill 6434 – Electric-Assisted Bicycles
- Parks – Streets – Stormwater Report for March 2018
- Long Beach Berm Modeling Study – Final Report
- Washington Surveying and Rating Bureau – Protection Class Change
- 9 Best Memorial Day Weekend Getaways in Washington
- Long Beach Peninsula Visitors Bureau Monthly Report March 2018

FUTURE CITY COUNCIL MEETING SCHEDULE

The Regular City Council meetings are held the 1st and 3rd Monday of each month at 7:00 PM and may be preceded by a workshop.
May 7, 2018, May 21, 2018 & June 4, 2018

ADJOURNMENT

American with Disabilities Act Notice: The City Council Meeting room is accessible to persons with disabilities. If you need assistance, contact the City Clerk at (360) 642-4421 or advise City Administrator at the meeting.

TAB - A



**CITY COUNCIL
WORKSHOP BILL
WS 18-07**

Meeting Date: April 16, 2018

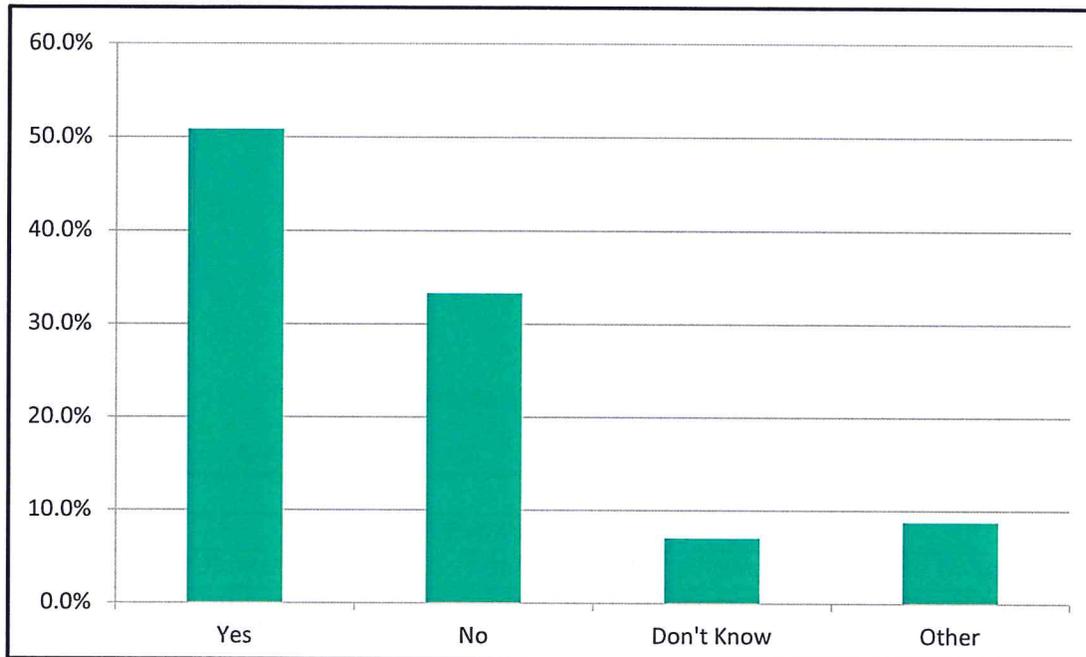
AGENDA ITEM INFORMATION		
SUBJECT: Fireworks survey results	<i>Originator:</i>	
	Mayor	
	City Council	
	City Administrator	
	City Attorney	
	City Clerk/Treasurer	
	City Engineer	
	Community Development Director	
	Events Coordinator	
	Fire Chief	
	Police Chief	
	Streets/Parks/Drainage Supervisor	
	Water/Wastewater Supervisor	
COST: N/A		
<p>SUMMARY STATEMENT: A recent survey was done by Pacific County Tourism at the request of “Not a ban / a better plan” since they have a much larger mailing list, including merchants. Attached are the survey results as compiled by the group for the Long Beach zip code. Included is a letter of response from Commissioner Wolfe.</p>		

Workshops are public meetings with the purpose of allowing the City Council to discuss topics. No formal decisions are made at workshops. While almost every meeting when a majority of the city council is present is considered a public meeting, that doesn't necessitate the Council allowing public comment. If the Mayor and Council request more information or clarification they may seek input from the audience.

Fireworks Discharge Days Reduction

Do you support reducing the legal fireworks discharge days on the Long Beach Peninsula from 8 days (June 28 to July 5) to 3 days (July 2, 3 and 4).

Answer Choices	Responses	
Yes	50.9%	29
No	33.3%	19
Don't Know	7.0%	4
Other	8.8%	5
Answered		57
Skipped		0



Fireworks Discharge Days Reduction

Please explain your answer to Question 1.

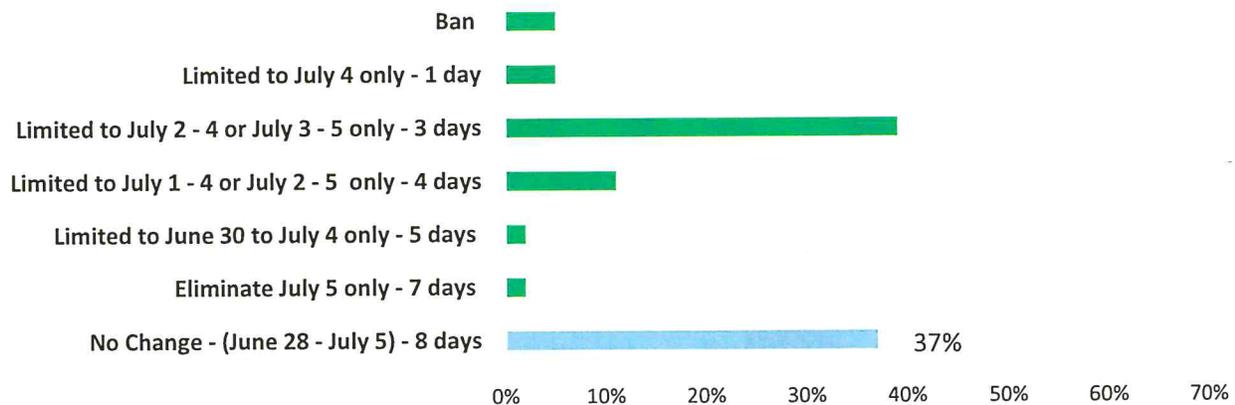
Answered 52

Skipped 5

In many cases the explanation revealed a preference or a different preference than the actual choice. The answers have been categorized by the comment.

The preference of those who did not explain their answer were categorized by the response to question 1.

Support Reduction to 3 days?



Tags	Responses
Ban	In support eliminating fireworks period. So three days is better than 8.
Ban	Do not like fireworks and prefer zero days.
Ban	In support eliminating fireworks period. So three days is better than 8.
1 day	I would like it to be only 1 day
1 day	I think it should only be on the 4TH, if reduced to 3 days, that will help calm the animals.
1 day	I'd support fireworks only on the 4th! And money to add enforcement officers for the neighborhoods.
3 day	(3 respondents indicated Yes to question 1 but didn't leave a response. There answer is included in this in depth analysis)
3 day	LESS TRASH!!! People that come to visit for the rest of July are disappointed and remark how dirty our beach is! We have oceanfront property and literally bribe our guests with ice cream and tootsie pops to pick up other peoples trash for weeks after the 4th. We kept vigilant on the mile either way from our path and removed several TONNES of trash from beach with our truck and dumpster. truly I would love a ban specifically on PLASTIC explosives that leave dangerous shrapnel behind forever.
3 day	Less mess, less noise
3 day	three days is plenty, keeps it "special" and is more considerate to those who don't like fireworks....a good compromise.
3 day	The sheer amount at our beach has gotten out of hand. Perhaps limiting the amount of allowed days would counter that somewhat.

3 day	Fewer days of fire danger.
3 day	It would be nice to be able to sleep on the days without them going off
3 day	I run an RV Park and it is very scary to all the animal who shay here. Also the fire works tend to go very late into the night.
3 day	Limiting it to only three days makes it more enjoyable
3 day	disruption to wildlife, the environment and pollution
3 day	These are not in order of importance. If so, they would all be # 1s! 1. It reminds many vets of some horrible experiences 2. Animals(wild and domestic) are extremely agitated(many have to be tranquilized) 3. Too many are hurt by illegal fireworks 4. Fire danger as some are drinking when igniting and can be careless. 5. Too much trash is created.
3 day	As a local that works, its tough to get rest when you are woken up all hours of the night with big booms. Plus the toll it takes on our wildlife and domestic pets.
3 day	It keeps up everyone up at night ad it scares pet.
3 day	They scare my dog and keep me up to late. The tourists are only here for the weekend. Plus to many accidents and fire hazards.
3 day	It terrorizes the dogs. The shorter the better.
3 day	It's just to many days. We as business owners have to get up early to prep for the day and those of us with animals are up with stressed out fur babies.
3 day	I think this is an outstanding compromise to address residence and merchants concerns about noise. A three-day "weekend" addresses the celebration, and frees the beach for families for the other days. And reduces the noise for hoteliers and the residential areas.
3 day	People come to the beach for vacation, and the 4th of July only comes once a year, let the visitors celebrate their independence with fireworks as long as they are using them within the guidelines of the law. Fireworks are beautiful if used properly. The only reason I would want 3 days of fireworks, is because the kids might spend all there money on fireworks, and not have any left to spend in my shop
3 days with 5th	the vendors need the business>>>i would say 7-3 to7-5 for shooting off >>>.Sales should start in June
3 days with 5th	It depends what day of the week the 4th falls on. I think the 3, 4, 5, are better days.
4 day	I would also support 4 days and maybe even 5, but 8 is too long.
4 day	i would include july 5th as well. best to get the leftover fireworks used immediately.
4 day	Feel current number of days is too long. Should maybe only be from July 1-4th.
4 day	8 days is too long. 4 days would be ok to me also.
4 days with 5th	Lets go to 4 days. 2,3,4,5 of July.
4 days with 5th	Lets go to 4 days. 2,3,4,5 of July.
5 days	I would be okay with June 30th to July 4th just so we caught a little bit of the weekend in there.
7 days - no 5th	I don't support such a radical change in days. I could live with removing the 5th, but not going from 8 to 3.
No	(2 respondents who answered No to Question 1 did not leave a comment and are counted in this in-depth analysis)
No	Major tourist attraction

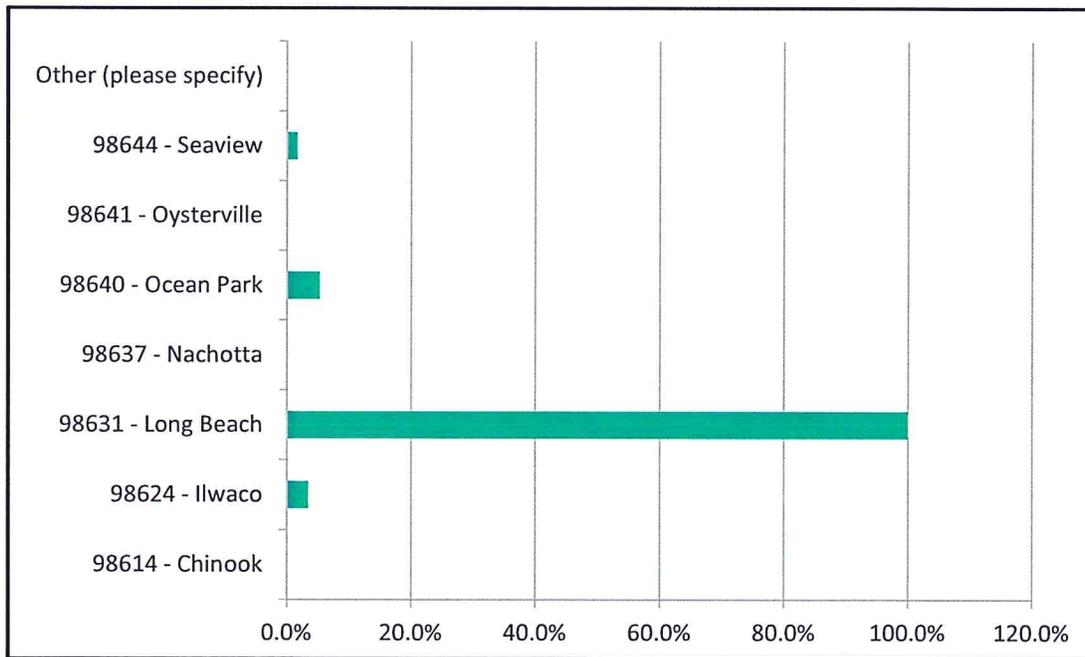
No	Our peninsula must survive on tourist dollars, if we start cutting back the days we can discharge fireworks we will lose these dollars to other cities. This will only hurt us and our economy,
No	Annoying as it is, that's why tourist come here, for this type of thing.
No	<p>As a business owner the 4th of July week is a HUGE shot in the arm after a long cold winter.</p> <p>Tourists want to come down and blow off steam; decreasing existing fireworks days would get in the way of that....not to mention increased law enforcement troubles.</p> <p>Long Beach is a unique destination and has been for decades. People move here because of that point but some unfortunately want to change it.</p> <p>Banning beach camping that one and only night was another mistake. I'd rather have the drunks on the beach than on our streets.</p>
No	<p>The local business community has a short seasonal window to keep us going financially.</p> <p>Those additional days give shop owners, restaurants, hotels, entertainment facilities, grocery stores etc. a big financial boost to help them sustain over the slow winter months. There has to be a financial amount attached to each day taken away for the business community to evaluate. Just a yes or no is not adequate.</p>
No	Don't see any good reason to change the current laws
No	Not sure what a reasonable time frame is. Our main concern is fires in the dunes, since our property abuts the WUB.
No	I have no preference
No	families have been coming to this beach to celebrate the 4th of July for many years. I want them to enjoy the same experience they always have.
No	You won't be able to enforce it.
No	Low regulations is a big draw. Restrictions are everywhere. Long Beach is an old school hold out. Don't change that
No	This year, with the fourth falling on a Wednesday, I think many will come down the weekend prior expecting to blow stuff up.
No	I enjoy fireworks and the income to Peninsula is needed.
No	I believe during this time as a business owner reducing the amount of days fireworks may be discharged could lose revenue for businesses as well as for the city. Also on years where the 4th of July is during the week it helps to get tourists here and to stay here.
No	We own a motel and the fireworks are a draw for our guests.
No	The reduced days will really hurt the local economy.
No	We are a motel and guests come because we have fireworks for 8 days.
No	The present number of days works fine.
No	The peninsula businesses make this community thrive. All activities that enhance our presence on the coast, are needed to draw visitors here. Grouchy people certainly don't make our community thrive.

Fireworks Discharge Days Reduction

What is the zip code(s) of your business?

Answer Choices	Responses	
98614 - Chinook	0.0%	0
98624 - Ilwaco	3.5%	2
98631 - Long Beach	100.0%	57
98637 - Nachotta	0.0%	0
98640 - Ocean Park	5.3%	3
98641 - Oysterville	0.0%	0
98644 - Seaview	1.8%	1
Other (please specify)	0.0%	0
Answered		57
Skipped		0

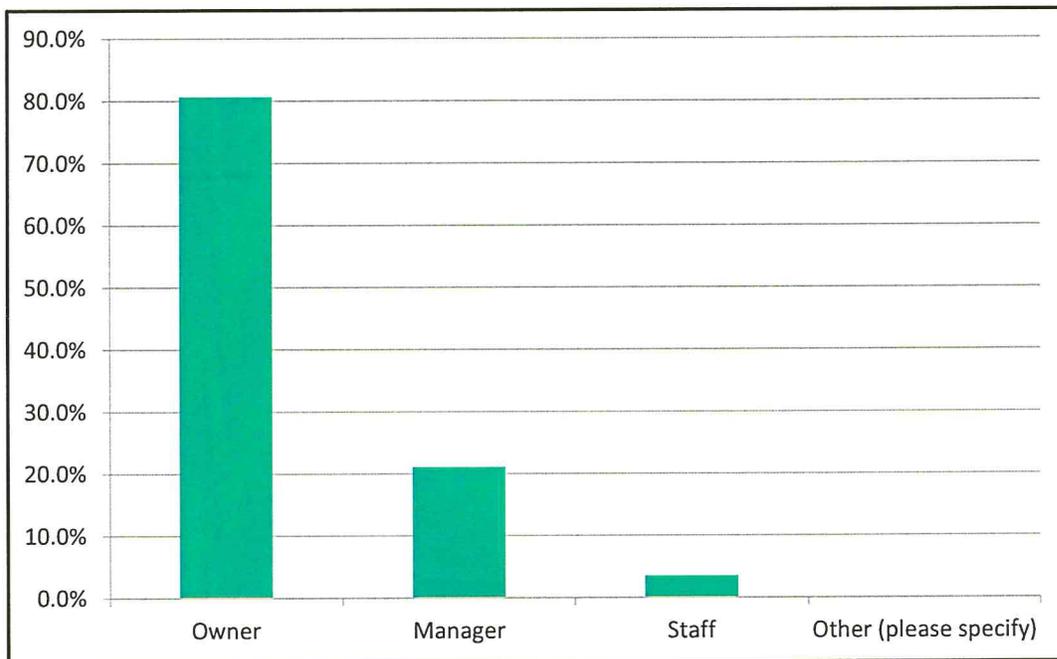
* answers add up to more than respondents due to indication of businesses in more than 1 zip code



Fireworks Discharge Days Reduction

What position to you have to the business?

Answer Choices	Responses	
Owner	80.7%	46
Manager	21.1%	12
Staff	3.5%	2
Other (please specify)	0.0%	0
Answered		57
Skipped		0

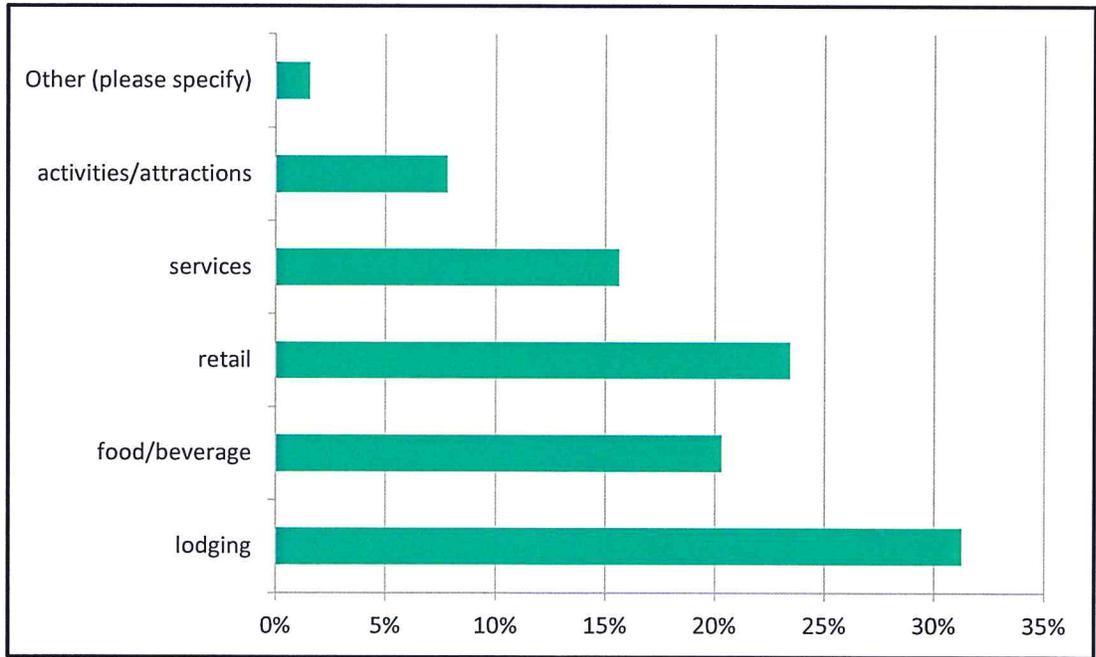


Fireworks Discharge Days Reduction

Choose the business type.

Answer Choices	Responses	Count
lodging	31.3%	20
food/beverage	20.3%	13
retail	23.4%	15
services	15.6%	10
activities/attractions	7.8%	5
Other (please specify)	1.6%	1
Answered		57
Skipped		0

* answers add up to more than the respondents due to indication of more than 1 business



David Glasson

From: Magen Michaud <magenmichaud@gmail.com>
Sent: Sunday, April 8, 2018 7:39 PM
To: Andi Day; Chadwick, Dan L (DFW); David Glasson; Roberts, Evan (PARKS); Fire Chief Jacob Brundage; Frank Wolfe; Jerry Phillips; Jon Schmidt; Shelly Pollock; Sheriff Scott Johnson; opchamber@opwa.com; Matt Winters; tcrose@co.pacific.wa.us; Bell, Josh (PARKS); Marie Guernsey; Tiffany Turner; Flint Wright
Cc: Vicki Vanneman; Mgm849@comcast.net; Mark Perez
Subject: Not a Ban a Better Plan Survey Results
Attachments: All.pdf; Compare 2017 to 2018 Revised.pdf

Hello partners and other interested people. Here is information concerning our latest survey. Attached are the survey details.

April 9, 2018

RE: Survey of Peninsula business leaders concerning potential reduction in legal fireworks discharge days.

Another survey by the Not a Ban a Better Plan committee was just completed. The Long Beach Peninsula Visitors Bureau sent a survey link in their weekly newsletter. Our purpose was to gauge business support of a reduction from the current 8 days of legal fireworks discharge to 3 days. Demographic questions concerning location of the business and their role were included. Of the 109 respondents, the vast majority, 77%, identified as business owners. The participants indicated the zip codes of the business were 52% in Long Beach, with 21% in Ocean Park, 18% in Ilwaco, and 8% in Seaview. **An in-depth analysis shows a 71% majority want a reduction.**

The results of this latest survey are similar to a survey done in 2017. The survey asked respondents to state their preference from several options to reduce the 4th of July fireworks discharge days. There were 596 respondents and the respondents demonstrated an overwhelming desire to reduce the legal discharge days. Demographic questions showed 83% were property owners, and 61% were registered voters. **The results were an 80% majority want a reduction.** The results were sent to all partners on September 17, and discussed at a town hall on September 20, but there was little response from the jurisdictions.

The 2017 survey was in response to the local jurisdictions reluctance to respond to a previous survey and numerous town hall meetings. Preliminary contacts with the Pacific County Commissioners and the Long Beach City Council in 2016 led us to believe they would respond to the citizens' requests and start the process of considering a reduction. We were discussing a possible launch of the public process with the County Commissioners. They were not willing to move forward unless all jurisdictions agreed; we also believed that all jurisdictions on the Peninsula need the same regulations. Long Beach Council was contacted preparatory to beginning the public process in early 2017. However, they said there was no Council consensus and, therefore, they were not going to pursue a change. This ended the effort because of Pacific County's stipulation.

The results of these two surveys demonstrate that a strong majority of the respondents who pay property taxes, who are registered to vote, and who own businesses, support a reduction in the 4th of July legal fireworks discharge days.

The question is – what are the jurisdictions going to do with this information? We sincerely hope the answer is to start the public process to enact ordinances that reflect the wishes of their constituents. We stand ready and willing to assist in that process.

The Not a Ban a Better plan Committee

David Glasson

From: Frank Wolfe <fwolfe@co.pacific.wa.us>
Sent: Monday, April 9, 2018 1:06 PM
To: Magen Michaud; Andi Day; Chadwick, Dan L (DFW); David Glasson; Roberts, Evan (PARKS); Fire Chief Jacob Brundage; Jerry Phillips; Jon Schmidt; Shelly Pollock; Scott Johnson; opchamber@opwa.com; Matt Winters; Tim Crose; Bell, Josh (PARKS); Marie Guernsey; Tiffany Turner; Flint Wright
Cc: Vicki Vanneman; Mgm849@comcast.net; Mark Perez
Subject: RE: Not a Ban a Better Plan Survey Results

Magen,

I am aware of the public sentiment for fewer days of fireworks around the 4th of July. Your survey shows about what I expect regarding this. Unfortunately, the survey doesn't address the problems that are foreseen by reducing the number of days to 3 within the County. We have talked before about these issues, and are no closer to solutions.

First, and this was an important concept from the beginning, all jurisdictions must speak with a single voice. Mixed messages or confusing multiple regulations in different areas and from different personnel were recognized right off as one of our major problems. We have all spent several years now arriving at the single message point. If the County were to change its ordinance to specify only 3 days at this point, and Long Beach did not, there would be two sets of rules on the same beach. I can think of little that would be more confusing or would cause more harm to what we have already accomplished than that.

There is also the point that the present county ordinance is the same as the State law on the subject. Much of the enforcement effort that has contributed greatly to the success of your program has been bolstered by the participation of State Parks, Dept. of Fish and Wildlife, State Patrol and other State agency personnel. If the county changed to 3-days, it is not at all clear that these folks would be in a position to enforce a local ordinance when it contradicted the state "days". If the Sheriff and local Police were left to conduct the enforcement on their own, they would be completely overwhelmed.

It was also pointed out to me that in this situation, on a day that was legal by State law for fireworks, but not legal by the local ordinance, it might be perfectly legal to use fireworks on the beach, since it is "owned" by the State.

The nature of the fireworks being used is an issue. While most of the problems are caused by "illegal" fireworks, they are nonetheless readily available and can only be enforced upon under very narrow circumstances that are difficult to meet in practice. These are not the "safe-and-sane" type of fireworks locally sold in the county and cities. These are also the largest source of plastic junk left over after use.

I don't bring up these points to be argumentative, or contrary. They are points that have come up in discussing this situation that have not been satisfactorily answered. Until we have answers, it would be reckless to push forward, knowing these issues await.

Please don't paint the County as being unreasonable, just because we don't have solutions to these problems. These are serious matters that must be resolved before considering a change. Most folks I talk to feel progress has been made over the last few years, and things have improved. Yes, there is room for more improvement, but we need to be cautious that our reach doesn't exceed our grasp.

Respectfully,

Frank Wolfe

From: Magen Michaud [magenmichaud@gmail.com]

Sent: Sunday, April 08, 2018 7:39 PM

To: Andi Day; Chadwick, Dan L (DFW); Dave Glasson; Roberts, Evan (PARKS); Fire Chief Jacob Brundage; Frank Wolfe; Jerry Phillips; Jon Schmidt; Shelly Pollock; Scott Johnson; opchamber@opwa.com; Matt Winters; Tim Crose; Bell, Josh (PARKS); Marie Guernsey; Tiffany Turner; fwright@longbeachwa.gov

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The results of these two surveys demonstrate that a strong majority of the respondents who pay property taxes, who are registered to vote, and who own businesses, support a reduction in the 4th of July legal fireworks discharge days.

The question is – what are the jurisdictions going to do with this information? We sincerely hope the answer is to start the public process to enact ordinances that reflect the wishes of their constituents. We stand ready and willing to assist in that process.

The Not a Ban a Better plan Committee

TAB - B



**CITY COUNCIL
WORKSHOP BILL
WS 18-08**

Meeting Date: April 16, 2018

AGENDA ITEM INFORMATION		
SUBJECT: Recycling discussion	<i>Originator:</i>	
	Mayor	
	City Council	
	City Administrator	
	City Attorney	
	City Clerk/Treasurer	
	City Engineer	
	Community Development Director	
	Events Coordinator	
	Fire Chief	
	Police Chief	
	Streets/Parks/Drainage Supervisor	
COST: N/A	Water/Wastewater Supervisor	
<p>SUMMARY STATEMENT: During previous workshops and Council meetings, the topic of recycling has come up again. Jay Alexander was gracious enough to provide links related to the recycling businesses and will provide his thoughts on starting a recycling program in the city at this time.</p>		

Workshops are public meetings with the purpose of allowing the City Council to discuss topics. No formal decisions are made at workshops. While almost every meeting when a majority of the city council is present is considered a public meeting, that doesn't necessitate the Council allowing public comment. If the Mayor and Council request more information or clarification they may seek input from the audience.



WASHINGTON REFUSE & RECYCLING ASSOCIATION

FOR IMMEDIATE RELEASE:

October 18, 2017

Contact: Brad Lovaas, WRRRA Executive Director, info@wrra.org

ATTACHMENT: WRRRA FAQ

Washington's Solid Waste and Recycling Industry Details Response to China's New Restrictions for Recyclable Materials Imports

New restrictions temporarily eliminate a key market for many recyclable materials, forcing diversion to domestic landfills

WASHINGTON – Today the Washington Refuse and Recycling Association (WRRRA) detailed the state industry's response to new and significant restrictions set by China on the import of recyclable materials to their country. The restrictions announced by the Chinese government in mid-July dramatically impact the amount and type of recyclable materials that China will import going forward. As a direct result of the significant and swift reduction in the size of the marketplace for recycled goods, Washington State's waste and recycling industry will be forced to temporarily divert recyclable materials to our state's landfills while new markets are developed. While the short-term impacts to our recycling system are significant, the adjustment is also an opportunity to review and improve our state's curbside recycling programs.

"Our region's commitment to recycling is a bedrock value that makes the Pacific Northwest special – we're proud of that," said **Brad Lovaas, Executive Director of the WRRRA**. "Our member companies – from major publicly-traded corporations to family-owned independent businesses – are proud of how our industry has partnered with the public to make our state's ambitious recycling goals a reality."

Lovaas continued: "We share the public's disappointment that materials that normally would be recycled are instead going to be diverted to a landfill. I know I speak for our entire membership when I say that we are dedicated to identifying short, mid- and long-term solutions for supporting a system that allows us to

honor our shared commitment to holding on to one of the country's leading recycling rate."

China notified the World Trade Organization in July that it plans to ban the import of at least 24 varieties of solid waste and recyclables, including types of plastic, unsorted paper, and metals commonly sold by U.S. recyclers. China will also apply stringent new quality standards to the remaining materials not covered by the ban. The ban, set to go into effect by the end of 2017, is part of a broader Chinese customs program called "Operation Green Fence," which began in 2013, aims to reduce waste importation and contamination of recyclable materials.

The latest phase of this operation is called "National Sword," which increases enforcement and bans the import of many materials. Wastes and recyclable materials are the sixth largest U.S. export to China. The combination of the ban on the import of many materials and dramatically increased standards to guard against contamination of other materials are together causing the current dramatic reduction in the recyclables marketplace.

"For purposes of public health and safety, sanitation, and fire safety, we encourage people to stick to their normal routine for sorting garbage, recycling, and food waste," **said Lovaas**. "If you want to help, please pay attention to the sticker on your co-mingled recycle bin or other information you have from your provider and local government solid waste divisions as to what can be recycled. If you are unsure – throw it in the garbage. When in doubt, throw it out."

The recycling system is 100% dependent on a marketplace for recyclable materials. Whether it is plastic, paper, or aluminum, the waste and recycling industry is only able to recycle waste if a marketplace exists for the waste products. The current situation is unique because China is a primary source of manufactured products and packaging and their policy change transpired abruptly, something that is challenging for infrastructure services like solid waste and recycling collections and processing because it is so complex.

Washington, Oregon, and California are particularly impacted by China's policy change because the West Coast is active in trade with China and other countries where imports/exports are made easier because of where they are located. Washington's recycling rate hovers around 50 percent, well above the national

average, in part because of its proximity to China. China is the largest importer of recyclable materials, consuming approximately 2/3 of all recyclable materials that are collected worldwide and is one of the biggest manufacturers in the world – named the #1 Most Competitive Manufacturing Nation in 2016 by Deloitte, a global financial and consulting firm.

This is a national and international issue, but the negative effects are very local. At this point, there is no excess capacity in the recycling facilities or markets in our region that can absorb the materials that China will no longer accept. Hence, this means there is not enough storage or processing capacity for the recyclable materials that are generated by the recycling programs in our state. As a result, this could create a potential crisis in which no markets would exist that can take the recyclable material. In the short term, this is forcing our waste and recycling industry to dispose of typically-recyclable materials in our system's landfills while it continues to seek long-term market and processing solutions.

About WRRRA

The WRRRA is a statewide trade association representing Washington's diverse and multifaceted solid waste handling industry. WRRRA is the oldest solid waste trade association in the western United States, having been formed in 1947. We represent your local curbside solid waste and recycling services companies. Member companies provide services in virtually every community throughout the state, providing those services under state law, administered by the Washington Utilities and Transportation Commission or by city contract. WRRRA Member companies also operate many of the material recovery facilities where the collected recyclables are sorted and processed for shipping.

###



WASHINGTON REFUSE & RECYCLING ASSOCIATION

China's National Sword Policy

Updated 3.1.18

- In 2013, China launched a customs program called “**Operation Green Fence**,” aimed at increasing environmental quality by reducing waste importation and contamination in recyclable materials. The latest phase of this operation is called “**National Sword**,” which **banned the import of many recyclable materials on January 1, 2018** and will lower the contamination rate for materials that will still be accepted.
- China notified the World Trade Organization in July 2017 that it planned to **ban the import of at least 24 varieties of solid waste and recyclables**, including mixed paper, plastics 3-7, metals, and other materials commonly exported by U.S. recyclers.
- **National Sword also imposes a new 0.5% contaminant limit for the remaining recyclable materials not covered by the ban.** A typical permitted recycling facility (Material Recovery Facility or MRF) achieves contaminant rates of 3-5%. The new limit is far below any existing international standard and all but unachievable with current equipment and system costs.
- **China is the single largest consumer of recyclable materials exported from the United States and worldwide. Recyclable materials are the sixth largest U.S. export to China.** U.S. recyclers, particularly on the west coast, have relied on demand from the Chinese market to sustain their operations.
- **China is the largest manufacturing nation in the world.** In January 2017, the U.S. exported 280 million pounds of plastics to China. By December 2017, exports fell to 41 million pounds. Economies around the world are growing, but there is no country or combination of countries that can consume the amount of material China has historically imported for manufacturing.
- **U.S. recycling is facing a time of challenge and uncertainty.** Washington Material Recovery Facilities (MRF) are working to achieve the drastically lower contamination rate. Conveyor belts have been slowed, separation equipment fine-tuned, and additional labor has been added. New equipment is on the way but will take time. For current U.S. recycling programs, the immediate impact is on mixed paper and plastics #3-7, which are covered under the ban, and attempting to achieve the new contaminant limits for the materials allowed for import.
- **There is also uncertainty over how many import licenses will be renewed by the Chinese Government.** In the first batch of 2017, China issued 2,937 import permits. China issued only 108 import permits in the first round of 2018, and many facilities in China will likely close. Other Chinese recyclers and manufacturers are relocating to other Asian countries. **As a result, there is continuing market uncertainty even for materials not covered by the ban.** Across our state, region, and nation, recyclable materials without a market demand are accumulating and may have to be diverted for landfilling in some communities.
- **U.S. recycling programs currently mandate the collection of many recyclables covered by the ban and many other materials affected by the new contamination levels.** The surplus of materials from mandated recycling programs will drive prices for recyclables to historic lows and leave others with no clear processing and manufacturing destination. The impact varies by region and local markets across the country, but the West Coast is suffering the strongest impacts due to historical reliance on Chinese markets for recyclables.
- **The ban presents an opportunity to review curbside recycling programs and improve their quality.** Communication about the new market realities across the recycling supply chain is essential to ensure high quality recyclables that will have a market. The list of the materials accepted in local recycling plans may need to be modified both in the short and longer terms. Reducing contamination in commingled recyclables collected at the curb is essential.
- **What can you do to help?** Check with your local recycling program to learn which materials are collected in the commingled bin through your program. Ensure that anything you recycle is on that list. Ensuring everything that goes into the bin is recyclable is crucial for reducing contamination. Source separation of recyclables from garbage is the first step. Recyclables must also be empty, clean, and dry. If you do not know whether something can be recycled, throw it in the garbage. **WHEN IN DOUBT, THROW IT OUT!**

Materials banned under National Sword

A [Comprehensive list of banned materials](#) is available on [wrra.org](#). For materials, not subject to the ban, China has instituted a new and extremely prohibitive quality standard for material limiting contaminants to one half of one percent (0.5%). This requirement applies to all materials, even those not covered under the ban.

The biggest impact for collection programs is on mixed unsorted paper and plastics type #3-7. The banned plastics are: Polyvinyl Chloride (PVC), Low Density Polyethylene (LDPE) Polypropylene (PP), Polystyrene (PS), and plastics made from a variety of resins. Materials commonly made from these banned materials include: Some water bottles, clear plastic containers, salad dressing bottles, squeezable bottles, yogurt containers, ketchup bottles, drinking straws, plastic cups and plates, CD cases, and empty medicine bottles, Styrofoam, plastic pipes, electronics, cds, dvds, and plastic bags.

Check with your local recycling program to of materials are collected through your program. Ensure that anything you recycle is on that list, and is clean, empty and dry. Ensuring everything that goes into the bin is recyclable is crucial for reducing contamination. If you do not know whether or not something can be recycled, throw it in the garbage. **WHEN IN DOUBT, THROW IT OUT!**

Other Resources:

- **WRRRA National Sword White Paper:** <http://www.wrra.org/wp-content/uploads/2018/01/Condensed-National-Sword-Whitepaper-1.16.18.pdf>
- **WRRRA National Sword FAQ:** <http://www.wrra.org/wp-content/uploads/sites/5884/2017/11/WRRRA-FAQ-on-Chinas-National-Sword-10.18.2017.pdf>

Sources:

- WTO Notice: <https://resource-recycling.com/resourcerecycling/wp-content/uploads/2017/07/CHN1211.pdf>
- [WCRRC Comments](#)
- National Waste & Recycling Association: <https://wasterecycling.org/blog/2017/10/02/3806/>
- Waste 360: <http://www.waste360.com/legislation-regulation/china-amends-proposed-contamination-standards-which-us-associations-still-see>
- Wastedive: <https://www.wastedive.com/news/china-proposes-new-05-contamination-standard-with-march-2018-enforcement/511122/>
- Resource Recycling: <https://resource-recycling.com/recycling/2018/02/06/latest-chinese-permit-details-show-impacts-national-sword/>
- Resource Recycling: <https://resource-recycling.com/plastics/2018/02/20/latest-trade-data-quantifies-export-pivot-away-china/>
- National Sword Impacts state-by-state: <https://www.wastedive.com/news/what-chinese-import-policies-mean-for-all-50-states/510751/>
- Wastedive: <https://www.wastedive.com/news/maxed-out-massachusetts-mrfs-prompt-recycling-disposal-waivers/514011/>
- Seattle Times: <https://www.seattletimes.com/nation-world/china-limits-waste-and-recyclers-scramble/>
- Bloomberg: <https://www.bna.com/us-recycling-woes-n57982089254/>
- ISRI: <http://www.isri.org/news-publications/article/2017/07/18/isri-statement-on-china%27s-intent-to-ban-certain-scrap-imports#.Wbcqg7J95aS>
- <http://www.plasticsnews.com/article/20180228/NEWS/180229895/chinese-recyclers-shifting-operations-to-elsewhere-in-asia>
- <https://www.inlander.com/spokane/cutting-the-crap/Content?oid=7025552>
- <https://www.wastedive.com/news/arrests-limited-import-licenses-are-latest-developments-in-chinas-scrap-p/510423/>
- http://www.yakimaherald.com/news/business/local/recycling-hits-a-snag/article_e722318e-b7b3-11e7-b9d7-cbdc447682ef.html
- <http://www.wastedive.com/news/what-you-need-to-know-about-chinas-scrap-import-policies/508163/>

For more information please contact WRRRA Executive Director Brad Lovaas at (360) 943-8859 or brad@wrra.org. Most recent version always available on [wrra.org](#)

This FAQ was developed by the Washington Refuse & Recycling Association

3 Things to Remember:

1. You should put your garbage and recycling at the curb (or whatever your normal routine is) and it will be collected just like it always has been.
2. If you do not know whether or not something can be recycled, throw it in the garbage. **WHEN IN DOUBT, THROW IT OUT!**
3. Every city and county recycling program is different. Check with your local solid waste program for the best information available specific to your area.

Frequently Asked Questions (FAQ)

Isn't there always a place for recycled material? Why do we rely on China?

The recycling system is 100% dependent on a marketplace for recyclable materials. Whether it is plastic, paper, or aluminum, we are only able to offer a service to collect and process it for you, if in turn, someone is going to buy it from us and use it for manufacturing or other purposes. A strong recycling system is good for the environment and for the economy. Today's situation is unique because China is a primary source of manufactured products and packaging. Their policy change transpired quickly, something that is challenging for infrastructure services like solid waste and recycling collections and processing because it is so complex.

Why do Chinese policies affect my recycling service?

Washington, Oregon, and California are particularly impacted by China's policy change because the West Coast is active in trade with China and other countries where imports/exports are made easier because of where they are located. Washington's recycling rate hovers around 50%, well above the national average, in part because of its proximity to China. China is also one of the biggest manufacturers in the world – named the #1 Most Competitive Manufacturing Nation in 2016 by Deloitte, a global financial and consulting firm and consuming 2/3 of all recyclable materials that are collected worldwide.

What has been done since China announced the changes that will impact the system here?

We have been searching for markets, both domestically and internationally, and fine-tuning our processing practices here at home. Internationally, we have representatives overseas in China working with processors, manufacturers, and the Chinese government. We are also developing and searching for new markets across the globe and in the United States to ensure as many materials as possible have a place to go. Working in conjunction with state and local agencies, we have been actively seeking solutions to strengthen and improve our recycling stream since China announced the new policy. One domestic example, among many, has been in our members' investments at their facilities to better sort materials so that the recyclable materials can be diverted efficiently and effectively. Our members are adapting in real-time, adjusting routes and working with our local government partners. Industry-wide, up and down the west coast, we have been focused on addressing this current challenge and ensuring that in the long-term, the recycling system is stronger than ever.

Every city and county may have differences in the system in place, but specific actions that we have taken system-wide include:

- slowed down the conveyor belts that carry potential recyclable goods past people and machines so they can be sorted and re-sorted with a higher level of precision
- hired more people so that there are more eyes and hands picking non-recyclable contaminants out of the recycle stream
- decreased the tolerances of the machines which are automated versions of what the employees are doing so that they reject more non-recyclable contaminants from the recycle stream
- overseas, we are actively seeking new markets for recyclables and continue to work with Chinese partners to secure outlets for the most materials possible under the new restrictions.

How long will this situation last?

At this point, it's unclear, but we have received no indication that the change in China's policies are temporary. The ban on unsorted paper, certain plastics, and other material goes into effect on January 1, 2018. Along with the ban, China also announced stringent new contaminant standards. In recycling, "contaminants" are non-permittable materials that are mixed in with the desirable materials, something that everyone in the recycling system works to prevent, but because of the nature of the solid waste stream, can be very challenging to manage. After January 1, 2018, China will only accept materials with a contaminant rate of 0.3%, something that is virtually unattainable. The impacts of all these policies will be felt before they are implemented, as shipments can take a month or more to reach China. We are actively searching for new markets and solutions, but as everyone realizes, the solid waste stream never stops and recycled materials are already accumulating at various facilities.

Many long-term solutions revolve around the nature of the recycle stream itself – we need to keep materials separated so that the mistakenly-placed hamburger wrapper does not mix with the carefully-sorted newspaper. If you want to help at home, you should re-read the requirements of the recycle program in your community and be diligent about what is included in your recycle bin.

WHEN IN DOUBT, THROW IT OUT.

If my recycled material is going to a landfill, will I be getting a “refund” toward what I pay for recycling services?

No, system costs will actually increase. The same amount of material is being collected and handled in an environmentally-responsible way. We are recycling as much material as we can, but must do so more slowly in order to meet stringent new quality standards, which increases costs and results in less overall material to market. The situation in most local areas varies, but because disposal costs are based on the weight of items going to a landfill, the costs of the system, including recycling, will actually increase. It is too early at this point to try to predict what the impact on rates could be. But we believe in the strength of the system and we are focused on solutions that minimize the impact of this situation on the environment, the economy and our customers.

What will be the impacts in terms of smell, dust, and the long-term life of the landfill because of this?

Landfills are managed carefully and heavily regulated. Washington has excellent landfill capacity which will last 100 years with only existing facilities. We intend to resolve this situation long before there is a capacity issue at landfills.

Aren't there other places in the U.S. that will use recycled materials?

Yes, there are places in the U.S. and around the world that use recycled materials. Those places already have a stream of recyclables. For example, in Chicago there are outlets for recyclable material and they receive it from the cities, counties, and states nearest to where those outlets are located. Those facilities are at capacity because of what they collect from local programs. We are actively seeking new “customers” for our recycled materials in India, other countries in North America, and throughout Asia. In the meantime, the stream of recycled “product” generated here does not slow down or stop.

Can individual customers store their own recycling until the situation is improved?

No. For purposes of sanitation, public health and safety, and fire safety, we encourage people to stick to their normal routine of putting garbage and recyclables at the curb (or however you normally manage garbage day). If you want to help, please pay attention to the sticker on your co-mingled recycle bin or other information you have from your provider as to what can be recycled. If you are unsure – throw it in the garbage. **WHEN IN DOUBT, THROW IT OUT.**

Recycling significantly reduces our carbon footprint. Will this crisis make global warming worse?

We have one of the strongest recycling systems in the country and we are confident we will find a solution to this situation long before it could ever significantly impact our region's commitment to reducing our carbon footprint.

Why can't we set aside recycled materials at a new location in Washington until we can find a marketplace to re-use them?

Recyclable materials are considered solid waste and are heavily regulated for a reason. There is not enough available warehousing in the state for safe storage especially since many recyclables are highly flammable. They cannot and should not be “set aside” anywhere that hasn't been vetted extensively under our regulatory system, which prioritizes public health and safety. The solid waste system is strong and intact and we should dispose of *all* items safely while we seek solutions to the issue at-hand with the recycling market.

Has something like this ever happened before?

No. This is the first time a policy change overseas has had such swift and direct impacts to recycling. But our system is strong, and we are confident we will find solutions in the middle and long-term. In the short-term, it's crucial that a problem in the international recycling markets does not become multiple problems for public health and safety. The solid waste collection, handling, and processing infrastructure to responsibly handle these materials exists and we will rely on it until solutions can be put in place.

What is the federal government's position on this situation? Should I contact my Senator or Representative?

In collaboration with our colleagues on the national stage, those of us at the state level have been in contact with federal stakeholders and internationally with the World Trade Organization. We are working hard to share information and to determine the best ways to protect our recycling system while resetting the market. An analogy is flying a plane while repairing it! What we would benefit from most is time, but nothing is affecting how committed we are to getting back on track.

TAB - C

LONG BEACH CITY COUNCIL MEETING

April 2, 2018

6:00 COUNCIL WORKSHOP

WS 18-07- Skateboard Park Update

7:00 CALL TO ORDER; PLEDGE OF ALLEGIANCE; ROLL CALL

Mayor Phillips called the meeting to order; asked for the Pledge of Allegiance and roll call.

ROLL CALL

David Glasson, City Administrator, called roll with C. Linhart, C. Kemmer, C. Cline and C. McGuire present. C. Murry was absent.

PUBLIC COMMENT

Larry Masterson and LeAnn Anderson commented on the amusement rides.

CONSENT AGENDA

Minutes, March 19, 2018 City Council Meeting

Payment Approval List for Warrant Registers 57739-57762 & 83155-83229 for \$216,096.72

C. Linhart made the motion to approve the Consent Agenda. C. McGuire seconded the motion; 4 Ayes, 1 Absent, motion passed.

BUSINESS

AB 18-23- Resolution 2018-04 Extension of Comprehensive Plan Deadline

Ariel Smith, Community Development Director, presented the Agenda Bill. This resolution extends the mandatory update for the City of Long Beach's Comprehensive Plan and Development Regulations. Since the rate of growth in the City limits is well below 17% RCW 36.70A.130(6)(f) allows for a two-year extension to complete a full Comprehensive Plan Update.

C. Linhart made the motion to approve Resolution 2018-04 extending the City of Long Beach Comprehensive Plan update to June of 2020. C. Cline seconded the motion; 4 Ayes, 1 Absent, motion passed.

AB 18-24- SUP 2018-04 LB Amusements

Ariel Smith, Community Development Director, presented the Agenda Bill. SUP 2017-07 was approved June 19, 2017 to allow the use of a portion of the City's property through October 31, 2017. An extension was granted in October of 2017 through March 31, 2018. That deadline has come and the owners of Long Beach Amusements have applied for another special use permit to continue to utilize the space. This extension was granted as the Council was under the impression that this use was temporary while work was being done to improve the applicant's property so they could permanently house the rides in the future.

C. Kemmer made the motion to deny SUP 2018-04, discontinuing the temporary use of City property. C. McGuire seconded the motion (2 Nays); 2 Ayes (C. Cline and C. Linhart); Mayor Phillips broke the tie with a 3rd Nay, motion Failed.

AB 18-25- Contract Amendment with EMD for Phase 1 of the Berm
Ariel Smith, Community Development Director, presented the Agenda Bill. Due to the comments received during the EA comment period and the subsequent modeling requested the cost of Phase 1 have increased. This amendment takes money from Phase 2 (construction) and adds it to Phase 1 (planning/design) to cover the additional, unexpected costs. The City also requested an extension for another year to complete Phase 1, this extension has been approved by both FEMA and EMD. This amendment confirms the aforementioned contract term extension and funds reallocation.

C. Linhart made the motion to authorize the City Administrator to execute the contract amendment for HMGP D16-003. C. McGuire seconded the motion; 4 Ayes; 1 Absent, motion passed.

AB 18-26- Ordinance 951 Vacation of Right-of-Way 10th ST N for JPCHA
Ariel Smith, Community Development Director, presented the Agenda Bill. Council Passed Ordinance 907 on February 17, 2015 vacating portions of 10th ST N, 11th ST N, and Oregon Ave N to the petitioner the Joint Pacific County Housing Authority as they needed the land to fulfill a parking requirement for the proposed low-income housing development. Since that time the JPCHA has purchased the lot on 10th ST N and Pacific Hwy and thus needing that portion of 10th ST N right-of-way vacated to meet the parking requirements. The Council has discussed this topic during workshops and Council meetings, the proposed Ordinance vacates the 200' portion between the highway and previously owned JPCHA property. **C. Linhart made the motion to approve Ordinance No. 951 amending Ordinance 907 vacating portions of 10th ST N, 11th ST N and Oregon Ave N and granting the property to the Joint Pacific County Housing Authority. C. Cline seconded the motion; 4 Ayes, 1 Absent; motion passed.**

AB 18-27- Resolution 2018-05 Declaration of Emergency
Mayor Phillips and David Glasson, City Administrator, presented the Agenda Bill. In November of 2017 the city was informed that we could no longer apply biosolids to our current site after May 1st 2018. The city then sought out a new application site which required an amendment to our biosolids general permit, this has been in the works for months. The new site identified requires road improvements so that the sludge truck can access the site. Due to time constraints, the city would need to declare an emergency to forego the bidding requirements for a public works project to complete this work.

C. Linhart made the motion to approve Resolution 2018-05 declaring an emergency to justify exemption from bidding requirements for a public works job. C. McGuire seconded the motion; 4 Ayes, 1 Absent; motion passed.

AB 18-28- Proposal for Vegetation Management Plan & CAO Update
David Glasson, City Administrator, presented the Agenda Bill. Ecological Land Services has provided a proposal to complete a Vegetation Management Plan and update the Critical Areas Ordinance wetland ratings.

C. Linhart made the motion to authorize the Mayor to accept the proposal from ELS for services as described. C. Cline seconded the motion; 4 Ayes, 1 Absent; motion passed.

DEPARTMENT HEAD ORAL REPORTS

CORRESPONDENCE AND WRITTEN REPORTS

- Pacific County Tourism Bureau 2018-2022 Strategic Marketing Plan
- Thank You Letter from the Washington State Northern Idaho Moose Association
- Mayor’s Legislators Meetings
- Long Beach Peninsula Visitors Bureau Board of Directors Meeting Minutes
- Jurassic Parliament – How to Handle Public Comment
- Sales Tax Collection
- Lodging Tax Collections
- State of Washington DOH Public Water System Operating Permit

ADJOURNMENT

The Mayor adjourned the meeting at 7:31 p.m.

Mayor

ATTEST:

City Clerk



I, THE UNDERSIGNED DO HEREBY CERTIFY UNDER PENALTY OF PERJURY THAT THE MATERIALS HAVE BEEN FURNISHED, THE SERVICES RENDERED OR THE LABOR PERFORMED AS DESCRIBED HEREIN AND THAT THE CLAIM IS A JUST, DUE AND UNPAID OBLIGATION AGAINST THE CITY OF LONG BEACH, AND THAT I AM AUTHORIZED TO AUTHENTICATE AND CERTIFY TO SAID CLAIM.

Council Member	Council Member	Council Member	Clerk/Treasurer
57764	Bell, Helen S	4/5/2018	\$306.69
57765	Binion, Jacob	4/5/2018	\$1,761.18
57766	Bool, Kristopher A	4/5/2018	\$1,527.80
57767	Cline, Kevin M	4/5/2018	\$266.95
57768	Cox, Mallory E	4/5/2018	\$147.66
57769	Gilbertson, Bradley K	4/5/2018	\$1,508.05
57770	Goulter, John R.	4/5/2018	\$1,868.58
57771	Huff, Timothy M.	4/5/2018	\$1,633.92
57772	Kaino, Kris	4/5/2018	\$1,015.75
57773	Kemmer, Hollis L	4/5/2018	\$266.95
57774	Kemmer, Larry L	4/5/2018	\$1,363.64
57775	Linhart, Steven P	4/5/2018	\$266.95
57776	Luehse, Paul J	4/5/2018	\$1,634.38
57777	McGuire, Tina M	4/5/2018	\$266.95
57778	Miller, Matt W	4/5/2018	\$1,251.28
57779	Mortenson, Tim	4/5/2018	\$1,880.29
57780	Murry, Del R	4/5/2018	\$266.95
57781	Padgett, Timothy J	4/5/2018	\$1,559.74
57782	Pursell, Whitney J	4/5/2018	\$1,013.28
57783	Quitner, Jonathan H	4/5/2018	\$971.13
57784	Williams, David L	4/5/2018	\$339.78
57785	Wood, Matthew T	4/5/2018	\$1,517.44
57786	Wright, Flint R	4/5/2018	\$2,709.07
57787	Zuern, Donald D.	4/5/2018	\$2,224.56
57788	Association of WA Cities	4/5/2018	\$29,226.92
57789	City of Long Beach - Fica	4/5/2018	\$12,624.22
57790	City of Long Beach - FWH	4/5/2018	\$7,799.44
57791	Council Gift Fund	4/5/2018	\$60.00
57792	Dept of Labor & Industries	4/5/2018	\$2,133.18

57793	Dept of Retirement Systems	4/5/2018	\$14,594.66
57794	Dept of Retirement Systems Def Comp	4/5/2018	\$2,375.00
57795	Massmutual Retirement Services	4/5/2018	\$575.00
57796	Teamsters Local #58	4/5/2018	\$183.50
83230	Postmaster	4/2/2018	\$462.01
83231	Basket Case Greenhouse	4/3/2018	\$386.02
83232	Bonney, Matt	4/3/2018	\$26.32
83233	Ellyson, Sue	4/3/2018	\$26.39
83234	Mortenson, Tim	4/3/2018	\$83.00
83235	Tangly Cottage Garden	4/3/2018	\$1,934.99
83236	Wright, Flint	4/3/2018	\$77.00
83237	Gilbertson, Brad	4/10/2018	\$313.96
83238	Kirby, Gary	4/10/2018	\$313.96
83239	Washington State Dept of Agriculture	4/10/2018	\$116.00
83240	Nagy, Branden	4/10/2018	\$33.00
83241	Tardiff, Donald W	4/10/2018	\$25.83
83242	Williams, David	4/10/2018	\$22.00
83243	Wood, Matt	4/11/2018	\$61.22
83244	Active Enterprises, Inc.	4/13/2018	\$2,045.47
83245	Airgas USA LLC	4/13/2018	\$42.88
83246	AlSCO-American Linen Div.	4/13/2018	\$249.73
83247	Association of Washington Cities	4/13/2018	\$320.00
83248	Astoria Janitor & Paper Supply	4/13/2018	\$1,062.59
83249	Bailey's Saw Shop	4/13/2018	\$9.71
83250	Beach Batteries	4/13/2018	\$18.29
83251	Blue Line Training LLC	4/13/2018	\$199.00
83252	BMC WELDING	4/13/2018	\$4,107.80
83253	Brighter Side Marketing	4/13/2018	\$775.00
83254	Brindlee Mountain	4/13/2018	\$4,817.95
83255	BSK Associates	4/13/2018	\$758.50
83256	Cartomation, Inc	4/13/2018	\$500.00
83257	Ced - Consolidated	4/13/2018	\$107.72
83258	Charter Communications	4/13/2018	\$221.95
83259	Chinook Observer	4/13/2018	\$340.10
83260	CHINOOK SALES & RENTALS	4/13/2018	\$1,929.59
83261	City of Long Beach	4/13/2018	\$1,278.48
83262	Clatsop Power Equipment	4/13/2018	\$110.02
83263	Cline, Kevin	4/13/2018	\$196.53
83264	CRUISE MASTER PRISMS	4/13/2018	\$17.40
83265	Day Wireless Systems	4/13/2018	\$475.64
83266	Dennis Company	4/13/2018	\$1,198.24
83267	Dept of Ecology	4/13/2018	\$8,440.19
83268	Englund Marine Supply	4/13/2018	\$717.93
83269	Evergreen Septic Inc	4/13/2018	\$188.00
83270	Fastenal Industrial & Construction	4/13/2018	\$324.08
83271	Ferguson, Sandra	4/13/2018	\$72.07

83272	Galls, LLC	4/13/2018	\$178.20
83273	Gray & Osborne	4/13/2018	\$3,554.88
83274	H. D. FOWLER	4/13/2018	\$50,762.95
83275	Hughes Fire Equipment, Inc	4/13/2018	\$1,243.18
83276	Inspired Results	4/13/2018	\$91.89
83277	Interstate Battery	4/13/2018	\$764.41
83278	Iron Mountain	4/13/2018	\$199.20
83279	iSpyFire, Inc.	4/13/2018	\$540.50
83280	MailFinance	4/13/2018	\$637.71
83281	McGwire, Tina	4/13/2018	\$196.53
83282	Oman & Son Builders	4/13/2018	\$716.99
83283	One Call Concepts, Inc.	4/13/2018	\$14.98
83284	Pacific County Auditor	4/13/2018	\$34.00
83285	Pacific County Treasurer	4/13/2018	\$11,302.72
83286	Peninsula Landscape Supply	4/13/2018	\$116.75
83287	Peninsula Sanitation	4/13/2018	\$1,102.60
83288	Penoyar, Joel	4/13/2018	\$1,000.00
83289	Penoyar, William	4/13/2018	\$1,500.00
83290	Phillips, Jerry	4/13/2018	\$180.94
83291	Planter Box	4/13/2018	\$6.48
83292	Public Utility District 2	4/13/2018	\$112.34
83293	PVI DEVELOPMENT LLC	4/13/2018	\$3,170.06
83294	Radio Shack	4/13/2018	\$226.56
83295	Ryan Herco Products Corp	4/13/2018	\$55.18
83296	Sea Western Fire	4/13/2018	\$27.54
83297	Sid's Iga	4/13/2018	\$13.62
83298	South District Court	4/13/2018	\$6,319.83
83299	STAPLES ADVANTAGE	4/13/2018	\$491.70
83300	State Auditor's Office	4/13/2018	\$427.95
83301	Sternberg Lighting	4/13/2018	\$1,295.00
83302	Suez WTS Analytical Instrument, Inc	4/13/2018	\$701.39
83303	Total Battery & Auto	4/13/2018	\$546.33
83304	Visa	4/13/2018	\$3,400.69
83305	WABO	4/13/2018	\$101.17
83306	Wadsworth Electric	4/13/2018	\$942.63
83307	Western Display Fireworks	4/13/2018	\$3,750.00
83308	Wilcox & Flegel Oil Co.	4/13/2018	\$1,629.68
83309	World Kite Museum	4/13/2018	\$1,625.00
83310	Zero Waste USA	4/13/2018	\$1,349.61
83311	Bonney, Matt	4/13/2018	\$53.19
83312	Brat Wear - Sound Uniform Solutions	4/13/2018	\$503.21
83313	Pacific County Sheriffs	4/13/2018	\$525.00
83314	Kulbel, Jim	4/13/2018	\$1,296.00
	Total	Check	\$234,256.04
	Grand Total		\$234,256.04

TAB - D



**CITY COUNCIL
AGENDA BILL
AB 18-29**

Meeting Date: April 16, 2018

AGENDA ITEM INFORMATION		
SUBJECT: Case No. SUP 2018-05 Request by Tye Caldwell To close a Portion of 9th ST NE for Rod Run – September 8th 2018	<i>Originator:</i>	
	Mayor	
	City Council	
	City Administrator	DG
	City Attorney	
	City Clerk	
	City Engineer	
	Community Development Director	
	Finance Director	
	Fire Chief	
	Police Chief	
	Streets/Parks/Drainage Supervisor	
	Water/Wastewater Supervisor	
COST: N/A	Other:	

SUMMARY STATEMENT: *Attached is a request from Tye Caldwell to close the portion of 9th ST NE from Pacific Hwy to Washington Ave N from 12:00am to 12:00pm on Saturday, September 8th. He would be responsible to put the proper signage up and take it down and restore the site to its original condition.*

RECOMMENDED ACTION: *Approve/Deny/Condition SUP 2018-05 allowing Tye Caldwell to close a portion of 9th ST NE from Pacific Hwy N to Washington Ave N for the full day of Saturday, September 8th, 2018.*

TEMPORARY USE: A land-use activity that occurs for a specific and limited period of time, typically authorized by a special use permit.

12-11-14: SPECIAL USE PERMIT: For events, uses, and other activities not specifically addressed by this title, an applicant may apply to the city council for a special use permit. The issuance of a special use permit is at the discretion of the city council. The city council may impose such conditions as are deemed necessary to mitigate impacts including, but not limited to, noise, lighting, traffic and hours of operation. A special use permit shall not be used to permanently permit a use that would otherwise be prohibited by the zone district in which the property is situated. A special use permit shall have an expiration date that is no more than one (1) year after the approval date. Upon application, the city council may grant a single extension of a special use permit.



APPLICATION FOR DEVELOPMENT APPROVAL

Return to Long Beach City Hall, 115 Bolstad Avenue West, PO Box 310, Long Beach, WA 98631

APPLICATION TYPE (circle those that apply)

Plat: short -- long Boundary-Line Adjustment Variance: zoning -- shoreline -- critical areas Binding Site Plan
Conditional Use Special Use Shoreline Substantial Development Other _____

APPLICANT INFORMATION

Name Tye Caldwell
Mailing Address P.O. Box 561 Long Beach
200 9th St NE

Telephone 360-214-1650
Fax _____
E-mail CaldwellTye@yahoo.com X

PROPERTY OWNER INFORMATION (if different)

Name _____
Mailing Address _____

Telephone _____
Fax _____
E-mail _____ X

PROPERTY INFORMATION

Site Address _____ Plat Name _____
Section _____ Township _____ Range _____ Lot _____ Block _____ Acres _____ Zoning A
Lender _____ Telephone _____
Current/Prior Use of Property _____

PROJECT INFORMATION

Architect/Designer _____ License/Cert _____ Telephone _____
Engineer _____ License _____ Telephone _____
Surveyor _____ License _____ Telephone _____

Design Review Required? Yes (separate application required) No
SEPA Checklist Required? Yes (must be submitted w/ application) No

Project Type (check or fill in all that apply)

Single Family Residential # of lots _____
 Multi-Family Residential # of dwelling units _____
 Commercial type _____ building square feet _____
 Other Non-Residential type _____ building square feet _____

Does the proposal create a new tax parcel or divide property ownership? Yes No
Is the subject property located within 200 feet of any surface water? Yes No
Does the proposal involve or require crossing or filling of any wetland, drainage system, or ditch? Yes No
Is the property located in an area subject to flooding? Yes No
Are there existing structures or infrastructure or utilities on the property? Yes No
Does the proposal require displacement, removal, or placement of materials in excess of 50 cubic yards? Yes No
Does the proposal change the existing land use classification of the subject property? Yes No

NOTE: The City of Long Beach assumes no responsibility to notify applicants of state or Federal permit requirements. If you believe your project may require a state or Federal permit, relay that information to the Long Beach Community Development Department.

ATTESTATION: I hereby certify that I prepared or directed preparation of this application, and that to the best of my knowledge the information provide is complete, accurate, and a true representation of the proposal. I understand the City of Long Beach relies on the representations made herein in determining whether this application may be approved, and that false, inaccurate (including missing) information may result in severe consequences, including and not limited to the removal at my expense of any site improvement constructed under this application. I further attest that I have legal authority to submit this application, and I agree to comply with any and all conditions of approval related to this development proposal.

APPLICANT SIGNATURE Tye Caldwell
OWNER SIGNATURE _____

DATE 4-5-18
DATE 4/5/18

Office Use Only Received by _____
Date _____

Amount of fee paid _____
Project No. _____



APPLICATION FOR DEVELOPMENT APPROVAL: INSTRUCTIONS TO APPLICANTS

Depending on the type of application you are submitting and the nature of your property and proposal, other city, state, or federal permits may be required. City staff will assist you in this determination. If state or federal approvals are required, they must be secured before the city will grant final approval of your project.

Public Hearing. Depending on the type of application you are submitting, a public hearing may be required. City staff will advise you on this matter. If a hearing is required, you must submit with this application a complete and current list of all property owners located within 300 feet of the property you propose to develop. This information may be obtained through the Pacific County Assessor's Office. If you are uncertain whether a property is located within 300 feet, you should include them. Public hearing dates are scheduled by the Hearings Examiner, and they are scheduled to allow sufficient time for public notice to be published in the local newspaper, and to be mailed to surrounding property owners.

Approval or Denial. The city has the authority to approve, approve with conditions, or deny your application. If the application is approved with conditions, you may be required to post a bond or other surety to ensure all conditions are met. The city's decision will be based upon provisions of applicable city regulations including, but not limited to, the Zoning Ordinance, Comprehensive Plan, Shoreline Master Program, or Unified Development Ordinance. These documents are available for your review at City Hall, or on the city's web site at www.longbeachwa.gov. Copies may also be purchased at City Hall.

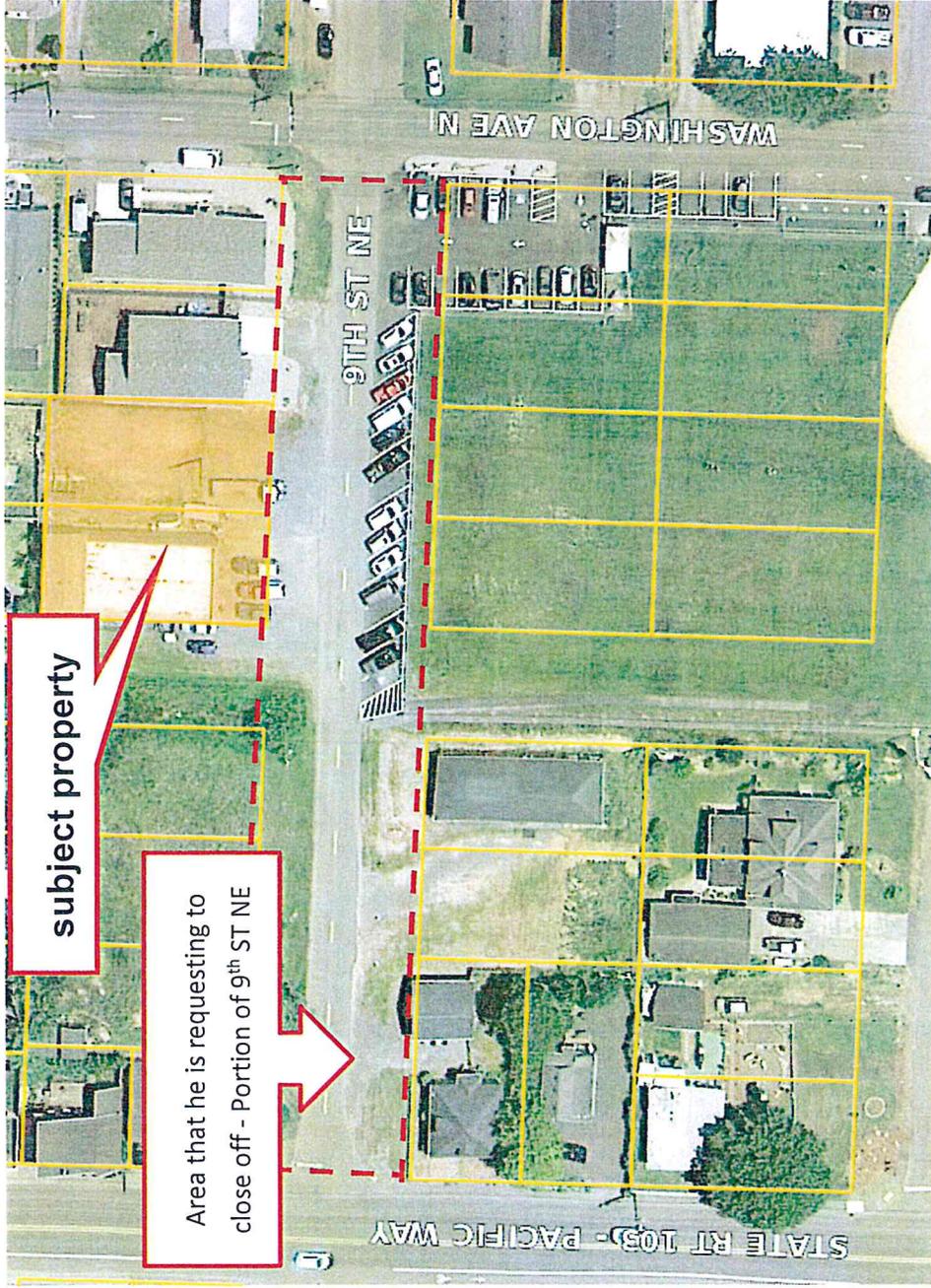
Standards of Review. The standards by which your application will be reviewed are set forth in the City's Unified Development Ordinance. If your application is for a variance, please carefully review the required showings described in Section 11-2D-1(B) of that ordinance; all stated requirements must be met in order for a variance to be granted. If you disagree with the city's decision regarding your application, you have the right to appeal the decision. Depending on who made the final decision, your appeal may be to the Hearing Examiner, the City Council or to Pacific County Superior Court. Your opportunity to appeal is limited to twenty-one (21) days after the decision is made; there is a required fee for filing an appeal.

The Planning Commission. Your application may require approval or initial review by the Planning Commission. The Commission usually meets on the second Monday of the month, and applications must be filed at least ten working days before the meeting date in order to be considered.

Required Information. The application requires information about the applicant, the property owner, and the project. The applicant and the property owner must provide their names and contact information. Please provide us with telephone numbers where you can be reached during the day, or where we can leave a message for you. If the applicant and owner are the same, this information need only be provided once. All drawings submitted must be drawn to scale. This is a generic application that is used for many types of projects, and some of the information requested may not apply to your project.

Required Signatures. The signatures of both the applicant and the property owner are required. If the applicant and the property owner are the same person, write "same" in one of the spaces. If the property is jointly owned, the signatures of all owners are needed.

If you have questions about this application or the review process, or if you need assistance, contact the Community Development Department at 360.642.4421 or at planner@longbeachwa.gov.



Case No. SUP 2018-05

Location Map

Caldwell

200 9th Street NE

Special Use Permit: Caldwell Rod Run Extravaganza – R1 Zone

plz close the ^{9th St NE} Road From 103 TO Washington
From 12:00 pm TO 12:00 am I'll pull signs Down
AT Night IT will Be BACK TO normal when
I Pull the signs down at midnight and
open the Road.

TYE Caldwell

Ariel Smith

From: Flint Wright
Sent: Thursday, April 5, 2018 11:22 AM
To: David Glasson; Ariel Smith; Jerry Phillips
Subject: 9th Street Closure

Guys,

It has come to my attention that there is a request to close 9th Street on Rod Run Weekend for a pig roast with a band and alcohol. I am not in favor of this being done. That is the wrong weekend to be closing streets for a party. I know the decision rests with the council. Since I may not be there when this is discussed please pass on my request that this not be allowed.

Chief Wright

TAB - E



**CITY COUNCIL
AGENDA BILL
AB 18-30**

Meeting Date: April 16, 2018

AGENDA ITEM INFORMATION		
SUBJECT: <i>Small Works Roster Agreement with Municipal Research and Services Center</i>	<i>Originator:</i>	
	Mayor	
	City Council	
	City Administrator	DG
	City Attorney	
	City Clerk	
	City Engineer	
	Community Development Director	
	Finance Director	
	Fire Chief	
	Police Chief	
	Streets/Parks/Drainage Supervisor	
	Water/Wastewater Supervisor	
COST: N/A	Other:	

SUMMARY STATEMENT: *Attached is an agreement with MRSC to provide Small Works Roster Services for the City of Long Beach. Small works rosters can be used for projects that are small enough to not require a formal bid. Interested parties register with MRSC and as needed by the city we can select from the lowest bidder on the roster. All legal publications are handled by MRSC.*

RECOMMENDED ACTION: *Approve the agreement with MRSC for Small Works Rosters.*



Washington Public Agency Contract Small Works, Consultant, and Vendor Rosters

This contract (the "Contract") is made by and between Municipal Research and Services Center of Washington ("MRSC"), a not-for-profit corporation, and the Washington local government (the "Public Agency"),

1. Purpose. The purpose of this Contract is to provide the Public Agency with membership in MRSC Rosters.
2. Scope of Services. MRSC shall host the entire Public Agency's individual Small Public Works Roster ("Small Works Roster"), individual Consultant Roster ("Consultant Roster"), and individual Vendor Roster ("Vendor Roster") (collectively "Rosters"). MRSC shall advertise at least annually for the Small Works Roster, Consultant Roster, and Vendor Roster in accordance with statutory requirements on behalf of the Public Agency. MRSC will assist small public works, consultant, and vendor business (collectively, "businesses") with roster registration throughout the year, receive applications, review applicant eligibility for compliance with basic statutory eligibility requirements, and maintain business applications in an online database.
3. Effective Date and Term. This Contract shall be effective in the year in which it is signed on either May 1 if signed prior to May 1 or December 1 if signed prior to December 1, for a period of one year.
4. Access to MRSC Rosters by Public Agency Prior to Legal Notice. As of the Contract effective date, the Public Agency may access the MRSC Rosters database at www.mrscrosters.org by entering its account login information, as will be provided by MRSC. The Public Agency may search for and view business applications as of the effective date of the Contract, but it may not contact businesses about roster projects until after the legal notice is posted.
5. Notification of Transition to MRSC Rosters. As of the contract effective date, the Public Agency may begin notifying interested businesses that they may register with the Public Agency at any time in the MRSC Rosters, but that the Public Agency will not begin using the hosted rosters until after the legal notice is posted.
6. Roster Legal Notice. MRSC shall post the statutorily-required roster legal notice on behalf of the Public Agency in a newspaper of general circulation relative to the location of the Public Agency. The notice will occur the first Monday of January or June, or during the week of the first Monday of January or June for weekly newspapers.
7. Use of MRSC Rosters by Public Agency. As of the date of the applicable legal notice in January or June, all departments of the Public Agency will discontinue use of any previously-maintained rosters and begin using the MRSC Rosters exclusively when choosing to follow a roster contracting process, in accordance with the following statutory requirements:
 - (a) Small Works Roster. The Public Agency will use the Small Works Roster to select businesses for public work projects in accordance with RCW 39.04.155, as now or hereafter amended. The Public Agency shall be responsible for its own and the selected businesses' compliance with all other laws and regulations governing public works contracting, including retainage and bonds, prevailing wages, and any other applicable requirements.
 - (b) Consultant Roster. The Public Agency will use the Consultant Roster to select businesses for consultant projects in accordance with the laws and ordinances applicable to the Public Agency, including Chapter 39.80 RCW when contracting for architectural and engineering services. The Public Agency shall be responsible for its own and the selected businesses' compliance with all laws and regulations governing the purchase of services.

(c) Vendor Roster. The Public Agency will use the Vendor Roster to select businesses to award contracts for the purchase of supplies, materials, and equipment not being purchased in connection with public works contracts in accordance with RCW 39.04.190, and any ordinances and other laws applicable to the Public Agency. The Public Agency shall be responsible for its own and the selected business' compliance with all laws governing such purchases.

8. Compensation of Businesses. The Public Agency shall be responsible for payments to any business that it selects as a result of its use of MRSC Rosters. The Public Agency shall make all such payments directly to the businesses selected by the Public Agency.

9. Annual Membership Fee. The Public Agency will pay MRSC an annual membership fee based on the five-year average of the Public Agency's total capital expenditures. Payment of the annual membership fee is due within thirty (30) days of the Contract effective date.

Based on the following Membership Fee Scale, the Public Agency will pay an annual membership fee of \$_____.

Total Capital Expenditures	Annual Membership Fee
Less than 5 million	\$135
5 to 10 million	\$275
10 to 15 million	\$425
15 to 25 million	\$575
25 to 50 million	\$745
More than 50 million	\$1145

10. Relationship of Parties. MRSC will perform the services under this Contract as an independent contractor and not as an agent, employee, or servant of the Public Agency. Nothing in this Contract shall be construed to render the parties partners or joint ventures.

11. Limitation of MRSC Liability. MRSC shall not be, directly or impliedly, a party to any contract with small works, consulting, or vendor businesses which the Public Agency may enter into as a result of the Public Agency's use of the MRSC Rosters. MRSC does not accept responsibility or liability for the performance of any business used by the Public Agency as a result of its use of the MRSC Rosters.

12. Hold Harmless and Indemnification. Each party shall defend, indemnify, and hold the other party harmless from any and all claims, injuries, damages, losses, or suits, including attorney fees, to the extent arising from any negligent act or omission of that party's officers, employees, volunteers, and agents in connection with the performance of this Contract.

13. Termination. This Contract may be terminated, with or without cause, by written notice of either party to the other. Termination shall be effective thirty (30) days after written notice. Termination of the contract by the Public Agency does not entitle the Public Agency to a refund of the membership fee prorated as to the time remaining in the contract term following termination.

14. Renewal. This Contract may be renewed annually by completing the online renewal process that includes confirming that the Public Agency will continue abiding by the terms outlined in this Contract and making payment within thirty (30) days from the effective date of either May 1 or December 1.

15. Non-assignment. MRSC shall contract with Strategies 360 for the hosting of the Public Agency rosters in the online database. MRSC shall not otherwise subcontract or assign any of the rights, duties, or obligations imposed upon it by this Contract without the prior express written consent of the Public Agency.

16. Governing Law and Venue. This Contract shall be governed by the laws of the State of Washington.
17. Severability. Should any clause, phrase, sentence or paragraph of this Contract be declared invalid or void, the remaining provisions of this Contract shall remain in full force and effect.
18. Complete Agreement. This Contract constitutes the entire understanding of the parties. Any written or verbal agreements that are not set forth herein or incorporated herein by reference are expressly excluded.
19. Public Agency Information. For purposes of Contract administration, the Public Agency provides the following information:

Official Public Agency Name: City of Long Beach

Common Public Agency Name (if different): _____

Mailing Address: P.O. Box 310
Long Beach WA 98631

County: Pacific

Type of Public Agency: City

Website: www.longbeachwa.gov

Primary Contact:

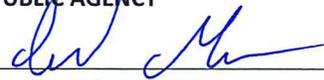
Name: David Glasson
 Title: Administrator
 Email: dglasson@longbeachwa.gov
 Telephone: 360 642 4421
 Facsimile: 360 642 8841

Additional Contact:

Name: Ariel Smith
 Title: Community Development Director
 Email: asmith@longbeachwa.gov
 Telephone: Same
 Facsimile: Same

20. Signatures. By signing this Contract, the Public Agency signatory below certifies that he/she has the authority to enter into this Contract on behalf of the entire Public Agency.

PUBLIC AGENCY



[Signature]

Administrator

[Title]

4/5/18

[Date]

MRSC

 [Signature]

MRSC Rosters Manager

[Title]

[Date]



MEMBER LOGIN

USERNAME [input]
PASSWORD [input]

LOG IN
HAVING TROUBLE LOGGING IN?

JOIN MRSC ROSTERS

BUSINESS MEMBERSHIP >

PUBLIC AGENCY MEMBERSHIP >

MORE IN THIS SECTION:

- Public Agency Membership
Roster Maintenance
Roster Types
Public Agency FAQ
Legal Notices
Public Agency Instructions
Transition Assistance
Contracting Resources

DOWNLOAD + VIEW:

- MRSC Rosters Webinar - Member
MRSC Rosters Webinar - Non-Member

BROWSE:

- Participating Agencies
Registered Businesses

PUBLIC AGENCY MEMBERSHIP

MRSC Rosters is an efficient and affordable way for Washington cities, counties, and special purpose districts to procure services using a roster contracting process. For a nominal annual membership fee, public agencies save staff time and financial resources by having MRSC provide full maintenance of their Small Public Works, Consultant, and Vendor rosters.

JOIN MRSC ROSTERS: 4 STEP PROCESS

Public Agencies have two opportunities to join each year. Once you have confirmed that your Agency is in compliance with the laws applicable to the type of roster(s) at issue (e.g., via enactment of an ordinance or resolution), follow the simple 4 step process. Joining MRSC Rosters means that you will exclusively use the rosters MRSC hosts on your behalf and discontinue use of any previously used rosters.

> Sample resolution

- 1. Select your membership contract
> SW/Con Rosters Contract (PDF)
> SW/Con/Ven Rosters Contract (PDF)
2. Determine your membership fee

Table with 2 columns: Total Capital Expenditures (based on the five year average), Annual Membership Fee

Service Categories

Total Capital Expenditures (based on the five year average)	Annual Membership Fee
Less than 5 million	\$135
5 to 10 million	\$275
10 to 15 million	\$425
15 to 25 million	\$575
25 to 50 million	\$745
More than 50 million	\$1145

3. Choose registration deadline

- > December 1st to begin in January
- > May 1st to begin in June

4. Submit contract by deadline via either:

> Mail:

MRSC Rosters
2601 Fourth Avenue, Suite 800
Seattle, WA 98121-1280

> Scan/Email:

mrscresters@mrsc.org

> Fax:

206.625.1220

After your registration has been processed and the deadline has passed, you should fully transition to the MRSC Rosters. [Learn more about transitioning >> .](#)

TAB - F

City of Long Beach Activities Report

March 2018

Wastewater Dept.

Call Outs - 1 (RAS Pump Failed.)

Meetings - 2 (G & O Sludge Site / PUD.)

Safety Meetings - 1 (Respirators / Fit Test & Maintenance.)

Plant Management - Monthly DMR's / Paperwork Review / Emails / Ordering Supplies / Engineers.

Samples – Daily Tests / Twice Weekly Testing (BODs , TSSs , and Fecals.)

Customer Service - 0

Locates - 1 Emergency Locates – 1 (PUD 3rd st. south.)

Hauling Sludge - 33 loads.

Lift Station Checking - Daily Action. (inspection / cleaning transducers)

Lift Station Wash down - 1 Plant Wash Down - 3

Samples to Lab - 3 (regular , Soil , Heavy Metals)

Pump / Blower Maint. – 3

Sink Hole Investigation - 1

Main Repairs - 0

Equipment Cleanup - 3

Headworks Debris Removal – 1 Decanting Digester – 3 (Approx. 18,000 Gal.)

Training -

All Crew Respirator Fit Testing.

Matt W Still Training at WWTP on weekends.

Other Activities –

Concrete Sidewalk Replacement. (Pioneer Market)

New Sludge Site Gates Installed.

Brushing New Sludge Site. (4 Days)

E-Mails with G & O on New Sludge Site Road Spec's.

Reviewed New Sludge Site with Road Contractor.

Office Organization.

Switched 5 Horse Pump with 2.5 Horse in RAS / WAS Pit.

Pulled Pump 17th st. north #2 (Jammed Impeller.)

Issues with RAS Pump 1. (Running on RAS Pump 2 until Repairs.)

City of Long Beach Activities Report

March 2018

Water Dept.

Call Outs - 1

Meetings - 6 Clam Festival / Evergreen Rural Water (Long range plan) / Naselle Rock / Staff / Fire Rating Engineer / US Fish Project.

Safety Meetings - 1 (Respirators / Fit Test & Maintenance)

Plant Management - Paperwork / Time Cards / Monthly DOH Report / Monthly DMR's. / Monthly Report / Bills / Log Book / Called Locates / Ordered Parts / Delivered New Personal Policies.

Customer Service - 5

Locates - 15

Emergency Locates – 1 (PUD 3rd st. south).

Re-reads - 13

Install New Meters - 2 30th Pac Hwy , Seacrest. Meter Reinstall - 0

New Service Investigations – 2 Valve Investigation - 2

New Service Prep – 2 Valve Can Raising - 2

Meter Removal – 0

Meter Repairs - 4

Hydrant Maint. - 0

Shut Off's - 6 Emergency Shut Offs - 1

Turn On's - 3

Res. Checking - 2

Res. Maint. – 0

Leak Repairs - 1 (15th st south & Wash)

Leak Investigations - 1

Equipment Cleanup - 3

System Samples - Weekly entire system.

Samples to Lab - 2

Training -

All Crew

Don , Tim , Tye , Larry , Matt

Respirator Fit Tested.

Remote Read Meter Training (2 Days).

Other Activities –

Digging Outfalls.

Reading Meters. (Long Beach)

Raising 2 Valve Cans.

Town Cleanup.

Graveling R.O.W.'s.

Evergreen Rural Water (Long Range Plan).

Programing New Meters.

Meter Repairs.

Installing Remote Read Meters.

New Lap Top Delivered.

Painted 2 Stand Pipes.

Education Outreach (High School).

Thank You So Much for

helping us with our

lot permits to our

home in Long Beach!

Great Customer Service!

Richard + Judy Yearz

Long Beach Police

P.O. Box 795
Long Beach, WA 98631

lbpchief@centurytel.net

Phone 360-642-2911
Fax 360-642-5273

04-01-18

Page 1 of 2

To: Mayor Phillips and Long Beach City Council

From: Chief Flint R. Wright

Ref.: Monthly Report for March 2018

During the month of March the Long Beach Police Department handled the following cases and calls:

Long Beach

510 Total Incidents
Aid Call Assists: 4
Alarms: 4
Animal Complaints: 3
Assaults: 6
Assists: 69
(Includes 15 Law Enforcement Agency Assists Outside City Boundaries)
Burglaries: 0
Disturbance: 16
Drug Inv.: 3
Fire Call Assists: 3
Follow Up: 127
Found/Lost Property: 7
Harassment: 6
Malicious Mischief: 5
MIP – Alcohol: 0
MIP – Tobacco: 0
Missing Persons: 2
Prowler: 2
Runaway: 0
Security Checks: 81
Suspicious: 30
Thefts: 14
Traffic Accidents: 3
Traffic Complaints: 17
Traffic Tickets: 5
Traffic Warnings: 77
Trespass: 12
Warrant Contacts: 4
Welfare Checks: 10

Ilwaco (Includes 7 Calls At Port)

192 Total Incidents
Aid Call Assists: 1
Alarms: 3
Animal Complaints: 3
Assaults: 9
Assists: 30
Burglaries: 0
Disturbance: 16
Drug Inv.: 2
Fire Call Assists: 0
Follow Up: 54
Found/Lost Property: 3
Harassment: 5
Malicious Mischief: 0
MIP – Alcohol: 0
MIP – Tobacco: 0
Missing Persons: 0
Prowler: 0
Runaway: 0
Security Checks: 7
Suspicious: 15
Thefts: 4
Traffic Accidents: 0
Traffic Complaints: 3
Traffic Tickets: 8
Traffic Warnings: 19
Trespass: 2
Warrant Contacts: 2
Welfare Checks: 6

Monthly Report Continued:

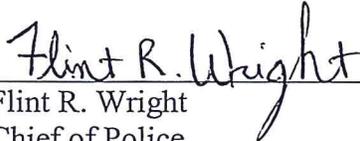
Page 2 of 2

On the 7th the department had firearms range training. We trained with our patrol rifles and shotguns.

I attended training on March 8th. The title of the course was “Leadership For A Lifetime – How The Past Prepares Us For The Future”. The training was designed to show how our past experiences can and should be used to make us better leaders.

Loretta attended training on March 14th and 15th. The first day of training was for the “National Instant Criminal Background System” known as “NICS”. This is a database run by the FBI and is used for running checks for subjects attempting to buy or transfer a firearm. The second day was for “Terminal Access Training”. This is the system that Loretta uses to run drivers licenses, criminal histories, stolen cars etc. Both classes were taught by the FBI and Washington State Patrol.

On March 14th I, along with Deputy Chief Meling, Officer Tim Mortenson and Mayor Phillips, met with the Ocean Beach School Superintendent and others to discuss both short term and long term goals for improving school safety. While we recognize that we can never make anything 100% safe there are many things that we can do to improve the safety of students and staff in respect to a school shooter. This will be an ongoing process and I encourage each of you to bring up this subject with me so that this stays a priority for both the department and the school district.



Flint R. Wright
Chief of Police

ENGROSSED SUBSTITUTE SENATE BILL 6434

State of Washington 65th Legislature 2018 Regular Session

By Senate Transportation (originally sponsored by Senators Rolfes, Rivers, Nelson, Brown, and Saldaña)

READ FIRST TIME 02/06/18.

1 AN ACT Relating to electric-assisted bicycles; amending RCW
2 46.04.169, 46.04.071, 46.20.500, and 46.61.710; and adding a new
3 section to chapter 46.37 RCW.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 **Sec. 1.** RCW 46.04.169 and 1997 c 328 s 1 are each amended to
6 read as follows:

7 "Electric-assisted bicycle" means a bicycle with two or three
8 wheels, a saddle, fully operative pedals for human propulsion, and an
9 electric motor. The electric-assisted bicycle's electric motor must
10 have a power output of no more than (~~one thousand~~) seven hundred
11 fifty watts (~~(, be incapable of propelling the device at a speed of~~
12 ~~more than twenty miles per hour on level ground, and be incapable of~~
13 ~~further increasing the speed of the device when human power alone is~~
14 ~~used to propel the device beyond twenty miles per hour)~~). The
15 electric-assisted bicycle must meet the requirements of one of the
16 following three classifications:

17 (1) "Class 1 electric-assisted bicycle" means an electric-
18 assisted bicycle in which the motor provides assistance only when the
19 rider is pedaling and ceases to provide assistance when the bicycle
20 reaches the speed of twenty miles per hour;

1 (2) "Class 2 electric-assisted bicycle" means an electric-
2 assisted bicycle in which the motor may be used exclusively to propel
3 the bicycle and is not capable of providing assistance when the
4 bicycle reaches the speed of twenty miles per hour; or

5 (3) "Class 3 electric-assisted bicycle" means an electric-
6 assisted bicycle in which the motor provides assistance only when the
7 rider is pedaling and ceases to provide assistance when the bicycle
8 reaches the speed of twenty-eight miles per hour and is equipped with
9 a speedometer.

10 **Sec. 2.** RCW 46.04.071 and 1982 c 55 s 4 are each amended to read
11 as follows:

12 "Bicycle" means every device propelled solely by human power, or
13 an electric-assisted bicycle as defined in RCW 46.04.169, upon which
14 a person or persons may ride, having two tandem wheels either of
15 which is sixteen inches or more in diameter, or three wheels, any one
16 of which is more than twenty inches in diameter.

17 NEW SECTION. **Sec. 3.** A new section is added to chapter 46.37
18 RCW to read as follows:

19 (1) A manufacturer or distributor of new electric-assisted
20 bicycles, where electric-assisted bicycles are defined in RCW
21 46.04.169, offered for sale or distribution in Washington state must:

22 (a) Beginning July 1, 2018, permanently affix, in a prominent
23 location, a label printed in arial font and at least nine-point type
24 that contains the classification number, top assisted speed, and
25 motor wattage;

26 (b) Comply with the equipment and manufacturing requirements for
27 bicycles adopted by the United States consumer product safety
28 commission.

29 (2) A person shall not tamper with or modify an electric-assisted
30 bicycle, as defined in RCW 46.04.169, so as to change the speed
31 capability of the electric-assisted bicycle, unless the label in
32 subsection (1)(a) of this section is appropriately replaced.

33 (3) Except as otherwise provided, an electric-assisted bicycle
34 or a rider of an electric-assisted bicycle is subject to the same
35 provisions of this title as a bicycle or the rider of a bicycle.

36 **Sec. 4.** RCW 46.20.500 and 2013 c 174 s 2 are each amended to
37 read as follows:

1 (1) No person may drive either a two-wheeled or a three-wheeled
2 motorcycle, or a motor-driven cycle unless such person has a valid
3 driver's license specially endorsed by the director to enable the
4 holder to drive such vehicles.

5 (2) However, a person sixteen years of age or older, holding a
6 valid driver's license of any class issued by the state of the
7 person's residence, may operate a moped without taking any special
8 examination for the operation of a moped.

9 (3) No driver's license is required for operation of an electric-
10 assisted bicycle (~~((if the operator is at least sixteen years of~~
11 ~~age)).~~ Persons under sixteen years of age may not operate ~~((an))~~ a
12 class 3 electric-assisted bicycle.

13 (4) No driver's license is required to operate an electric
14 personal assistive mobility device or a power wheelchair.

15 (5) No driver's license is required to operate a motorized foot
16 scooter. Motorized foot scooters may not be operated at any time from
17 a half hour after sunset to a half hour before sunrise without
18 reflectors of a type approved by the state patrol.

19 (6) A person holding a valid driver's license may operate a
20 motorcycle as defined under RCW 46.04.330(2) without a motorcycle
21 endorsement.

22 (7) A person operating a motorcycle with a stabilizing conversion
23 kit must have a valid driver's license specially endorsed by the
24 director for a three-wheeled motorcycle to enable the holder to
25 operate such a motorcycle.

26 **Sec. 5.** RCW 46.61.710 and 2011 c 171 s 81 are each amended to
27 read as follows:

28 (1) No person shall operate a moped upon the highways of this
29 state unless the moped has been assigned a moped registration number
30 and displays a moped permit in accordance with RCW 46.16A.405(2).

31 (2) Notwithstanding any other provision of law, a moped may not
32 be operated on a bicycle path or trail, bikeway, equestrian trail, or
33 hiking or recreational trail.

34 (3) Operation of a moped, electric personal assistive mobility
35 device, or motorized foot scooter(~~((or an electric-assisted~~
36 ~~bicycle))~~) on a fully controlled limited access highway is unlawful.
37 Operation of a moped(~~((or))~~) on a sidewalk is unlawful. Operation of a
38 motorized foot scooter(~~((or))~~) or ~~((an))~~ class 3 electric-assisted
39 bicycle on a sidewalk is unlawful, unless there is no alternative for

1 a motorized foot scooter or a class 3 electric-assisted bicycle to
2 travel over a sidewalk as part of a bicycle or pedestrian path.

3 (4) Removal of any muffling device or pollution control device
4 from a moped is unlawful.

5 (5) Subsections (1), (2), and (4) of this section do not apply to
6 electric-assisted bicycles.

7 (6) Electric-assisted bicycles and motorized foot scooters may
8 have access to highways (~~(, other than limited access highways,)~~) of
9 the state to the same extent as bicycles, subject to RCW 46.61.160.

10 (7) Subject to subsection (~~((+6))~~) (10) of this section, class 1
11 and class 2 electric-assisted bicycles and motorized foot scooters
12 may be operated on a (~~(multipurpose trail)~~) shared-use path or
13 (~~(bicycle lane)~~) any part of a highway designated for the use of
14 bicycles, but local jurisdictions or state agencies may restrict or
15 otherwise limit the access of electric-assisted bicycles and
16 motorized foot scooters, and local jurisdictions or state agencies
17 may regulate the use of class 1 and class 2 electric-assisted
18 bicycles and motorized foot scooters on facilities and properties
19 under their jurisdiction and control. Local regulation of the
20 operation of class 1 or class 2 electric-assisted bicycles, upon a
21 shared use path designated for the use of bicycles that crosses
22 jurisdictional boundaries of two or more local jurisdictions, must be
23 consistent for the entire shared use path in order for the local
24 regulation to be enforceable; however, this does not apply to local
25 regulations of a shared use path in effect as of January 1, 2018.

26 (~~((+6))~~) (8) Class 3 electric-assisted bicycles may be operated on
27 facilities that are within or adjacent to a highway. Class 3
28 electric-assisted bicycles may not be operated on a shared-use path,
29 except where local jurisdictions may allow the use of class 3
30 electric-assisted bicycles. State agencies or local jurisdictions may
31 regulate the use of class 3 electric-assisted bicycles on facilities
32 and properties under their jurisdiction and control. Local regulation
33 of the operation of class 3 electric-assisted bicycles, upon a shared
34 use path designated for the use of bicycles that crosses
35 jurisdictional boundaries of two or more local jurisdictions, must be
36 consistent for the entire shared use path in order for the local
37 regulation to be enforceable; however, this does not apply to local
38 regulations of a shared use path in effect as of January 1, 2018.

39 (9) Except as otherwise provided in this section, an individual
40 shall not operate an electric-assisted bicycle on a trail that is

1 specifically designated as nonmotorized and that has a natural
2 surface tread that is made by clearing and grading the native soil
3 with no added surfacing materials. A local authority or agency of
4 this state having jurisdiction over a trail described in this
5 subsection may allow the operation of an electric-assisted bicycle on
6 that trail.

7 (10) Subsections (1) and (4) of this section do not apply to
8 motorized foot scooters. Subsection (2) of this section applies to
9 motorized foot scooters when the bicycle path, trail, bikeway,
10 equestrian trail, or hiking or recreational trail was built or is
11 maintained with federal highway transportation funds. Additionally,
12 any new trail or bicycle path or readily identifiable existing trail
13 or bicycle path not built or maintained with federal highway
14 transportation funds may be used by persons operating motorized foot
15 scooters only when appropriately signed.

16 ~~((7))~~ (11) A person operating an electric personal assistive
17 mobility device (EPAMD) shall obey all speed limits and shall yield
18 the right-of-way to pedestrians and human-powered devices at all
19 times. An operator must also give an audible signal before overtaking
20 and passing a pedestrian. Except for the limitations of this
21 subsection, persons operating an EPAMD have all the rights and duties
22 of a pedestrian.

23 ~~((8))~~ (12) The use of an EPAMD may be regulated in the
24 following circumstances:

25 (a) A municipality and the department of transportation may
26 prohibit the operation of an EPAMD on public highways within their
27 respective jurisdictions where the speed limit is greater than
28 twenty-five miles per hour;

29 (b) A municipality may restrict the speed of an EPAMD in
30 locations with congested pedestrian or nonmotorized traffic and where
31 there is significant speed differential between pedestrians or
32 nonmotorized traffic and EPAMD operators. The areas in this
33 subsection must be designated by the city engineer or designee of the
34 municipality. Municipalities shall not restrict the speed of an EPAMD
35 in the entire community or in areas in which there is infrequent
36 pedestrian traffic;

1 (c) A state agency or local government may regulate the operation
2 of an EPAMD within the boundaries of any area used for recreation,
3 open space, habitat, trails, or conservation purposes.

--- END ---

Parks - Streets - Storm Water March Monthly Report

Monthly

Safety Meetings

Bi-Monthly

Staff Meetings

Mondays

Street Sweeping

Backpack Blowing of sidewalks and brick parks

Boardwalk and dune trail Maintenance

Thursdays

Mowing the mini parks and ball fields

Daily

Restroom maintenance

Garbage maintenance

Festivals / Events /set up and tear down

Softball and baseball

Training

Kitzman attended a 3 day class for water and sewer

- 1 .Pressure washing the sidewalks planters and brick walkways
2. Put the wind screens up and set the barbeques out at the beach pavillion
3. Cut trees back at 4th so blvd
4. Repairing the floor at the old kite building
5. Hung the flags and banners downtown

6. Repaired the burnt out Boardwalk lights and turned on the water to the drinking Fountains
7. Fixed 2 street lights
8. Cold patched
9. Installed a new Fish bike rack at 3rd so and pacific hwy
10. Cleaned maintenance shop
11. Scraping the sod off the sidewalks north pacific hwy
- 12 .Painted the floors at the sid synder restrooms
- 13 .Painted the inside of the 5th street restrooms
- !4. Poured the curb and side walk back at pioneer market
15. Hung up the 2 events banners across the hwy
- 16 .Mowing the right of ways with the john deere tractor

Long Beach Berm Modeling Study*Frank I. González¹, Randall J. LeVeque²***University of Washington Tsunami Modeling Group****UW Departments of****¹Earth and Space Sciences and ²Applied Mathematics**

Abstract. A berm design was developed for compatibility with guidelines published by the Federal Emergency Management Agency (FEMA) for vertical evacuation structures; the design utilized the maximum flooding depth results of a previous modeling assessment of the Long Beach berm site (FEMA, 2012; González, et al., 2013). Recently, the American Society of Civil Engineers (ASCE) published new ASCE 7-16 guidelines that are expected to be adopted in the near future for tsunami vertical evacuation structures (ASCE, 2017). One major difference between the FEMA and ASCE guidance is that ASCE 7-16 imposes exceedance criteria on the maximum wave height values offshore at the 100 m isobath (the “eta100 criteria,” see Appendix A). Tests of the berm design for both FEMA and ASCE minimum height criteria were conducted with the GeoClaw model (Berger, et al., 2010; LeVeque, et al., 2011; Gonzalez, et al., 2011; NOAA, 2011). Several issues arose in the interpretation and application of ASCE 7-16 in the context of hydrodynamic models that provide two-dimensional solutions of tsunami flow depth and other parameters. Nonetheless, we conclude that the new berm design is not compliant with ASCE 7-16 minimum berm height criteria, and is marginally compliant with the FEMA (2012) criteria that guided the berm design.

Background

The probability that an earthquake of magnitude 8 or greater will occur on the Cascadia Subduction Zone (CSZ) in the next 50 years has been estimated to be 10-14% (Petersen, et al., 2002). The last such event occurred in 1700 (Satake, et al., 2003; Atwater, et al., 2005) and future events are expected to generate a destructive tsunami that will inundate Long Beach and other Washington Pacific coast communities within tens of minutes after the earthquake main shock.

In 2012, the Project Safe Haven planning process resulted in a proposal by the Long Beach School District to construct a vertical evacuation berm behind the Long Beach Elementary School (Project Safe Haven, 2011a). Consequently, the Washington Emergency Management Division funded a study to assess the tsunami hazard at the proposed berm site. This GeoClaw modeling study produced estimates of the maximum flooding and current speeds at the berm site for two earthquake scenarios, a magnitude 9.2 (9.2M) event on the Alaska Aleutian Subduction Zone (AASZ) and a 9M event on the CSZ (Gonzalez, et al., 2013).



Figure 1. Berm location. Small white rectangle is the fine resolution berm DEM, large white rectangle is a coarser grid, designated LB02. North is up. White dot is 2013 berm location. The Long Beach School campus buildings are just east of the berm site.

Subsequently, the City of Long Beach was awarded a FEMA grant for construction of a vertical evacuation berm and PND Engineers were contracted to oversee the berm design and construction (City of Long Beach, 2016a). PND developed a new berm design that differed significantly from the 2013 version, and a new location was selected about 50 m southwest of the original 2013 berm site. Figure 1 presents the Long Beach Elementary School campus and the location and footprint of the PND berm design.

An Environmental Assessment Report was prepared and published in November 2016 (City of Long Beach, 2016b) and FEMA announced a public review period of 28 November - 30 December 2016. On 29 December, FEMA received comments from the lead author of ASCE 7-16 that questioned the new berm design, noting that ASCE 7-16 contained new structural design guidance for vertical evacuation structures that would likely be adopted in the future, superseding the 2012 FEMA guidance. On 28 June 2017, the Mayor of Long Beach submitted a request to the WA Emergency Management Division (EMD) for guidance and assistance in resolving the issue of design criteria for the Long Beach berm. On 21 August 2017, approval was received from the Long Beach mayor for a University of Washington study, specifically to test the new berm design against ASCE 7-16 design criteria.

Minimum Height Requirements

This study focuses on testing the conformance of the berm design with Minimum Height requirements for vertical evacuation structures that are recommended by FEMA (2012) and ASCE 7-16. The FEMA (2012) criteria are given in Section 5.3 Elevation Considerations, as

“The recommended minimum freeboard is one story height, or 10 feet (3 meters) above the tsunami runup elevation used in tsunami force calculations. The recommended minimum elevation for a tsunami refuge area is, therefore, the maximum tsunami runup elevation anticipated at the site, plus 30%, plus 10 feet (3 meters). This should be treated as an absolute minimum, with additional conservatism strongly encouraged.”

and by ASCE7-16 as

“6.14.1 Minimum Inundation Elevation and Depth. Tsunami refuge floors shall be located not less than the greater of 10 ft (3.05 m) or 1-story height above 1.3 times the Maximum Considered Tsunami inundation elevation at the site as determined by a site-specific inundation analysis, as indicated in Fig. 6.14-1. This same Maximum Considered Tsunami site specific inundation elevation, factored by 1.3, shall also be used for design of the Tsunami Vertical Evacuation Refuge Structure in accordance with Sections 6.8 to 6.12.

The 3.05 m freeboard recommendation in both 2012 FEMA and 2017 ASCE guidance is due to physical/engineering reasoning that this represents the height of one story in a typical building and, since any inundation of that building level will render occupation of that level unsafe, then the refuge must be on the building floor above that inundated level.

The 1.3 amplification factor is recommended by 2012 FEMA because “Determination of a suitable elevation for tsunami refuge must take into account the uncertainty inherent in

estimation of the tsunami runup elevation ...” A more physical/engineering rationale is given by 2017 ASCE, stating that the purpose of this factor is to “ ... account for additional buildup of water level at the forward edge of the building ...” (ASCE, 2017 Commentary, Section C6.10.2.2 Drag Force on Components) and adding that “ ... the additional 30% factor is consistent with the skill level of present-day tsunami inundation models ...” (ASCE, 2017 Commentary, Section C6.14 Tsunami Vertical Evacuation Refuge Structures).

In addition to these two safety factors, 2017 ASCE also sets criteria on the maximum offshore tsunami amplitude, η , at the 100 m isobath, i.e., the “ η_{100} criterion,” discussed below and in Appendix A.

The GeoClaw Model

To meet the goal of this study, above, simulations of tsunami generation, propagation and inundation were conducted with the GeoClaw model, which solves the nonlinear shallow water equations; the code features high-resolution shock-capturing finite volume methods and adaptive mesh refinement (Berger, et al., 2011). GeoClaw has undergone extensive verification and validation (LeVeque and George, 2007; LeVeque, et al., 2011), including multiple benchmark tests as part of a U.S. National Tsunami Hazard Mitigation Program (NTHMP) benchmarking workshop (NTHMP, 2012).

- Bathymetric/Topographic Digital Elevation Models (DEMs)

Digital elevation models (DEMs) of integrated bathymetry and topography information are essential input to the GeoClaw model. This study employed DEMs that included the most recently released 1-minute resolution ETOPO1 data and the 1/3 arc-second DEM known as “Astoria V3”, both downloaded from the website of the National Centers for Environmental Information (NEIC), part of the National Oceanic and Atmospheric Administration (NOAA).

Note that the Astoria V3 DEM is different from the version used in the 2013 modeling. The Astoria DEM available for the 2013 study was found to contain numerous artifacts in the Long Beach area. DNR, working with NGDC, determined that lidar data had not been properly cleaned and contained tree tops and buildings in this region. A modified DEM was provided by DNR for a limited region around the berm site, which was combined with the Astoria DEM elsewhere. Since the completion of the 2013 study, the official Astoria DEM has been modified in the entire Long Beach area. Around the berm site it is very similar to the topography used in 2013, although not identical.

PND provided a DEM of their berm design at a resolution of 1/60 arc-sec, and Table 1 summarizes the characteristics of the DEM. The berm resolution of 1/60 arc-sec at the berm latitude is equivalent to a (longitude, latitude) computational cell size of approximately (0.34 m, 0.51 m) over the berm extent. This DEM was interpolated to a resolution of approximately (0.13 m, 0.20 m) for use in the GeoClaw model (Figure 2).

The PND berm design height above the “Grade Plane” (see definition in Section 6.2, ASCE 7-16) was not provided, so we must estimate this value, because the 2012 FEMA and 2017 ASCE guidance defines the Minimum Vertical Evacuation Structure Heights in terms of

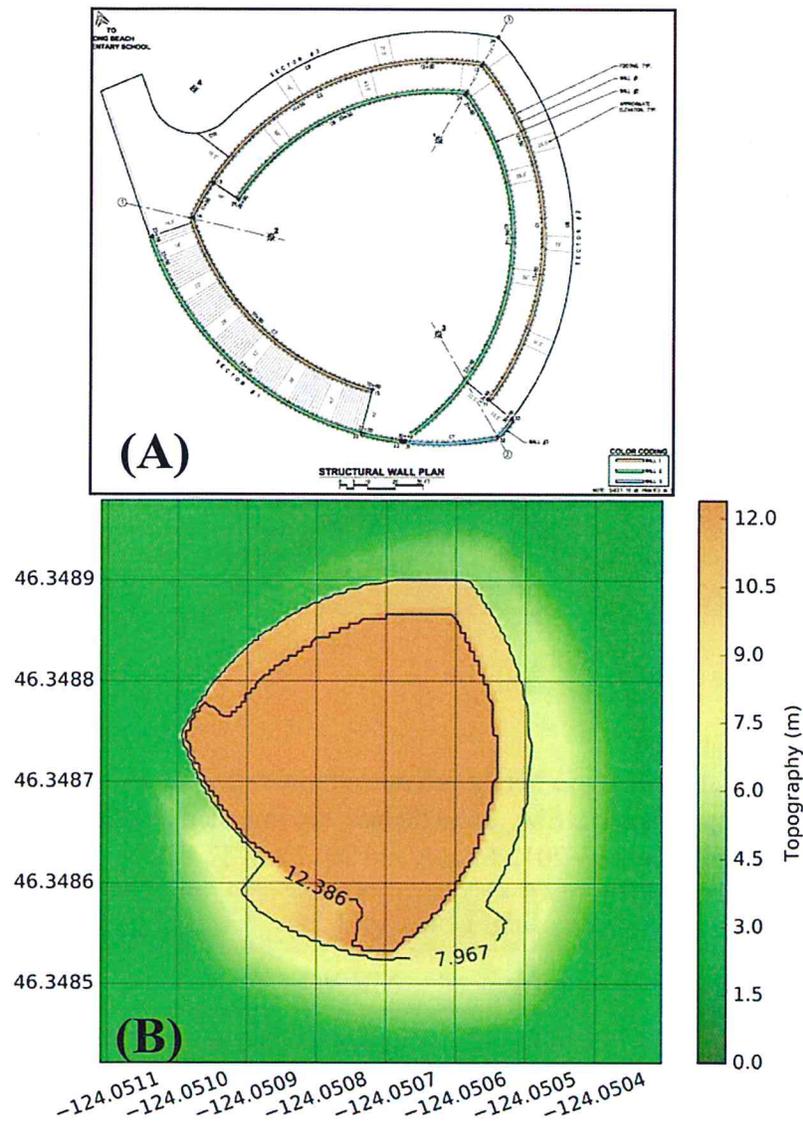


Figure 2. (A): PND berm plan view and elevation (m) with respect to local grade. **(B):** Berm DEM, interpolated to a spatial resolution of approximately 0.13 m.

maximum inundation depth and berm height, both referenced to the Grade Plane level. Table 2 summarizes this estimate, in which we first define the Grade Plane as the mean value of the original topography that underlies the 2,673 square meter area of the berm DEM; this value was 2.76 m ±22 cm, referenced to mean high water (MHW). Next, because the berm DEM assigns the value 12.39 m above MHW as the maximum height at the flat top of the berm, we take the height of the berm referenced to the local Grade Plane as $12.39 - 2.76 = 9.63$ m.

However, we note that PND states the intended berm height is “approximately 32 feet” or about 9.75 m, and describes site preparation as a process in which, after some excavation “... structural fill would be placed over an area of approximately 30,500 square feet to restore

Table 1. Characteristics of PND Berm DEM. The naming convention is (x,y) for (Longitude, Latitude).

Quantity	Units	Variables	Value	Value
x Extent	deg	x1,x2	-124.05111	-124.05055
y Extent	deg	y1,y2	46.34842	46.34898
Resolution	deg	dx, dy	4.6296296296E-06	4.6296296296E-06
Resolution	arc-sec	dx, dy	1.6666666667E-02	1.6666666667E-02
Resolution	m	dx, dy	0.35514	0.51450
Dimensions	deg	DX, DY	0.00056	0.00056
Dimensions	m	DX, DY	42.96	62.23
Dimensions	ft	DX, DY	140.94	204.18
Area	m**2	A	2673.45	
Area	ft**2	A	28776.06	

Table 2. Computation of Berm height referenced to Grade Plane, using the Berm DEM and original underlying topographic DEM. Nonetheless, the intended height of 9.75 m is used in computations of compliance with 2012 FEMA and 2017 ASCE. below. See discussion. above.

Height (m)	Height (m)
2017 DEM Berm height, referenced to MHW	12.39
"Grade Plane" referenced to MHW, computed as the mean value of the original topography that underlies the Berm DEM	2.76
Berm height referenced to Grade Plane (DEM Berm height - Grade Plane)	9.63

the original grade level" (see Section 3.3, City of Long Beach, 2016b). This intended height of 9.75 m is 12 cm more than the estimate in Table 2 but within the ±22 cm uncertainty of the Grade Plane estimate based on the DEM and our definition of the Grade Plane level. Since, presumably, the final berm height can be controlled during construction, in the computations that follow we assume that the construction of the berm would produce the intended height of 9.75 m with respect to the Grade Plane and that the Grade Plane is itself at least 2.76 m above MHW.

- Earthquake Scenarios

Specification of the tsunami generation process is also a critical input to the GeoClaw model. This study used the L1 earthquake scenario developed by Witter, et al (2013); this M9 earthquake on the CSZ is one of 15 peer-reviewed seismic scenarios used in a hazard assessment study of Bandon, OR, and is based on an analysis of data spanning 10,000 years. The length and width of L1 are approximately 1000 km and 85 km, respectively, and salient features of the earthquake crustal deformation (and therefore the sea surface and land deformation) are the coastal subsidence at Long Beach of about 2 m and a north-south zone of more than 10 m maximum tsunami wave height about 100 km west of the Berm site (Figure 3). This L1 scenario is in use by Washington State for previous tsunami hazard assessment studies because (a) the resulting inundation line is interpreted as the 95% confidence level that the inundation will not be exceeded (Witter et al., 2013) and (b) although there is significant uncertainty in the average return period of the L1 scenario, based on a simple analysis of the evidence presented by Witter et al. (2013), a range of 1990-3300 years seems reasonable (R. Witter, personal communication) and brackets the commonly used 2500-year hazard mitigation planning horizon.

A modified version of L1, L1x1.11, was also used, in which L1 was multiplied by 1.11 to meet the ASCE 7-16 criteria for the maximum offshore tsunami amplitude, η , at the 100 m isobath, i.e., the “ η_{100} criterion.” This criterion and the resulting η_{100} values produced by the L1x1.11 source are described in Appendix A. We note here that multiplying the entire L1 deformation field by a single constant factor increases both the initial offshore tsunami wave height and the degree of coastal subsidence and that, in turn, each of these effects tend to increase the maximum inundation flood depth.

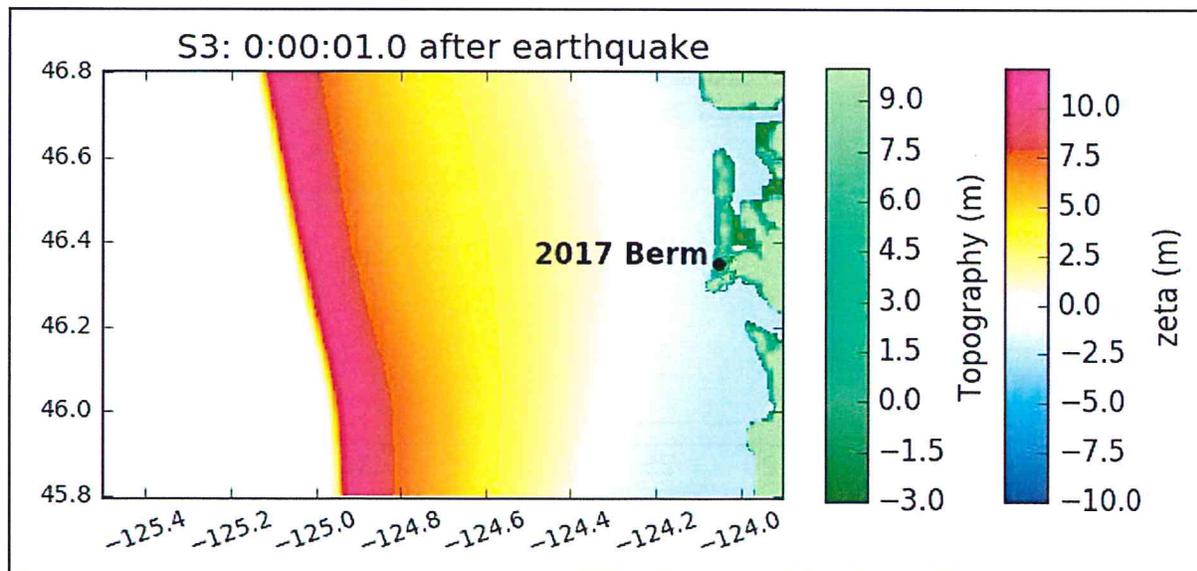


Figure 3. L1 earthquake scenario at 1 second after the main shock, illustrating the sea surface and land deformation.

Study Simulations

Check of 2013 Simulation

Originally, a single simulation was planned to test conformance of the berm design with ASCE 7-16 guidance. However the berm design was found to be out of compliance with ASCE 7-16 in this first simulation, identified as Scenario 1 (S1). Therefore, in light of the significant time and effort expended to reach this point in the Long Beach Berm Project (City of Long Beach, 2016a), Scenario 2 (S2) was developed to check the results of the 2013 GeoClaw Bare Earth study on which the new berm design was based. This test scenario used the latest version of the GeoClaw software, but with the 2013 input — i.e., with the 2013 DEMs for bathymetry/topography and the 2013 internal GeoClaw model settings such as the computational domain extent, the levels of Adaptive Mesh Refinement (AMR) and resolution, friction, dry cell tolerances, etc.

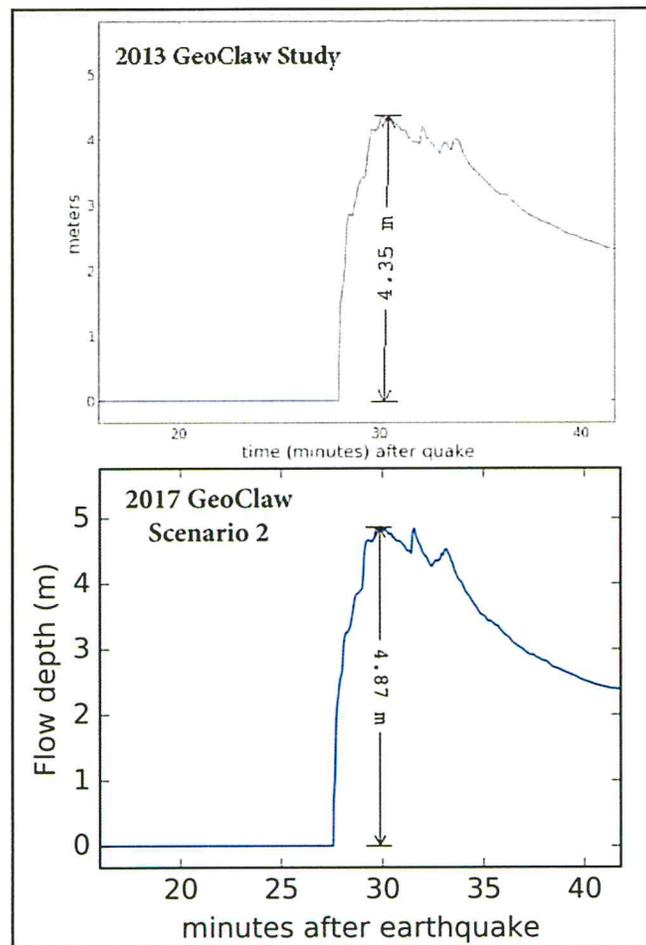


Figure 4. Scenario 2 results — a check on 2013 computations of Bare Earth inundation depth at the 2013 berm site. **Top:** 2013 GeoClaw Bare Earth time series from the original study. **Bottom:** 2017 GeoClaw time series result from this study.

Scenario 2 results are presented in Figure 4. There is an almost exact correspondence in the temporal evolution of inundation depth, but the Scenario 2 maximum inundation depth is about 12% higher than in the 2013 study. Because there are numerous factors that might be responsible for this difference, an investigation of the specific factor or combination of factors responsible would likely be very time-consuming to pursue and is beyond the scope of this study. However, since Scenario 2 used the latest version of GeoClaw, this difference is likely due to the changes and improvements in the GeoClaw software since 2013, and we have confidence in the results of the four simulations, described next.

Bare Earth and Berm Simulations

Structure/tsunami interactions can be extremely important and should always be included when possible; even though such modeling is not mentioned in ASCE 7-16, it may be included in the future because the ASCE 7-16 criteria continue to be clarified and modified by the ASCE 7-16 Panel. However, only Bare Earth modeling results are referenced in the 2017 ASCE design criteria sections, so we developed three more simulations to complete a four-member set of scenarios (S1, S3, S4, S5) for each combination of the two sources (L1x1.11 or L1) and the two physical settings (Berm or Bare Earth). All were conducted with the 2017 GeoClaw software, GeoClaw internal settings and the latest bathy/topo DEMs. Table 3 summarizes the most important features of each scenario, including the purpose of each and the general result of the simulation.

Results and Discussion

Table 4 presents the minimum berm height computations using the criteria presented in the 2012 FEMA and 2017 ASCE guidance (see discussion, above, and Appendix A), the intended berm height of 9.75 m, and the maximum inundation depths obtained in each scenario.

There is substantial variation in the maximum inundation depth over the extent of the Berm DEM and neither 2012 FEMA nor 2017 ASCE provide specific guidance as to which value should be used. Table 4 entries for maximum inundation depth were obtained by first saving the maximum value of inundation depth recorded at each computational cell of the extent of the Berm area during the duration of each simulation, then finding the largest of all these maximum values. In the Bare Earth scenarios, S4 and S5, this resulted in maximum inundation depths that were displaced toward the lower right corner of the Berm DEM; this seemed questionable as a measure of tsunami impact on the berm, so the maximum value at the center of the Berm DEM was also computed; both values are entered in the Bare Earth scenario columns for comparison.

Bare Earth Simulation Results

Scenario 5 is the only scenario in which the berm design is compliant, if the lower value of maximum inundation depth at the center of the berm is taken; this is perhaps unsurprising, since this scenario represents the criteria under which the berm was designed, i.e., the 2012 FEMA Bare Earth L1 scenario. This compliance corresponds to a very small freeboard margin

Table 3. Summary of simulations conducted for this study. The column “GeoClaw settings” refers to internal numerical model details such as computational domain extent, levels of Adaptive Mesh Refinement (AMR) and resolution, friction, dry cell tolerances, etc.

Simulation	Purpose	Source	Bathy/ Topo	GeoClaw settings	Berm or Bare Earth	Result
Scenario 1	Test Compliance with 2017 ASCE Minimum Height	L1x1.11	2017	2017	2017 Berm	Berm design is non-compliant by 4 meters
Scenario 3	Test Compliance with 2012 FEMA Minimum Height	L1	2017	2017	2017 Berm	Berm design is non-compliant by 2.4 meters
Scenario 4	Test Compliance with 2017 ASCE Minimum Height	L1x1.11	2017	2017	Bare Earth	Depending on the maximum inundation height estimate used, the Berm design is non-compliant by 0.9 - 1.6 meters
Scenario 5	Test Compliance with 2012 FEMA Minimum Height	L1	2017	2017	Bare Earth	Depending on the maximum inundation height estimate used, the Berm design is compliant by 0.1 meters or non-compliant by 0.3 m

Table 4. Computations of Minimum Berm Height and Berm Design Compliance. The design Berm height was assumed to be 9.75 m, even though an estimate based on the berm DEM produced a value of 9.63 m (see Table 2 and discussion, above). Maximum Inundation Depth was obtained from computations summarized graphically in Figures 5-8; two values are entered for Bare Earth scenarios, corresponding to the largest maximum over the entire Berm DEM and the maximum value at the center of the Berm DEM.

Parameters (m)	S1 2017 ASCE L1x1.11 Berm (m)	S3 2012 FEMA L1 Berm (m)	S4 2017 ASCE L1X1.11 Bare Earth (m)	S5 2012 FEMA L1 Bare Earth (m)
Max Inund. Depth <i>Over Entire Berm DEM</i> <i>At Center of Berm DEM</i>	8.21	6.99	6.40 5.88	5.40 5.09
Plus 30% of Max Inund. Depth <i>Over Entire Berm DEM</i> <i>At Center of Berm DEM</i>	2.46	2.10	1.92 1.76	1.62 1.53
Plus additional freeboard	3.05	3.05	3.05	3.05
Min Berm Height <i>Over Entire Berm DEM</i> <i>At Center of Berm DEM</i>	13.72	12.14	11.37 10.69	10.07 9.67
Design Berm Ht - Min Berm Ht <i>Over Entire Berm DEM</i> <i>At Center of Berm DEM</i>	-3.97	-2.39	-1.62 -0.94	-0.32 0.08

of only 0.08 m; however, it must be noted that the berm design is based on the original 2013 study, which obtained a lower value of 4.4 m for the maximum inundation depth. Scenario S4, with the larger ASCE-compliant source, L1x1.11, results in non-compliance of the berm design by about 1 - 1.6 m, depending on which of the two values of maximum inundation depth are used..

Berm Simulation Results

Scenarios S1 and S3 are simulations with the berm in place. As expected, the flow depth in front of the berm is higher than the values resulting from the bare earth simulation. From the maximum flood depth entries in Table 4, we can estimate the amplification factors for scenarios S1 and S4 as $8.21/5.89 = 1.39$ and for the S3 and S5 scenarios as $6.99/5.09 = 1.37$, where we have used the maximum inundation depth at the center of the Berm DEM. As a result, we see that the berm is about 4 m too low in Scenario 1 (with source L1x1.11) and 2.4 m too low in Scenario 3 (with source L1).

But it is not clear that the two safety factors should be applied to the Berm simulation results, S1 and S3. The 3.05 m freeboard is for a solid berm wall in this study, not a building floor level subject to flooding, so one might question whether the entire 3.05 meters is necessary as a safety factor. It may also be questionable to apply the 1.3 safety factor to account for tsunami/berm interactions, since the model computes these interactions directly. But alternatively, if the 1.3 factor is applied as a conservative adjustment that accounts for model error, then it could be argued that that the 1.3 factor should be applied twice to a Bare Earth result, to account for both the lack of tsunami/berm interaction computations and the possible model error in these computations. Clarification by the ASCE 7-16 Panel is needed on such issues. If the safety factors are deemed necessary, then the berm design does not conform to the ASCE 7-16 requirements for minimum berm height.

Figures 5-8 provide graphic summaries of the results for S1, S3, S4 and S5. The location of the largest maximum inundation depth (referenced to the Grade Plane) for each scenario is indicated as a black circle in Figures 5-8. In the case of the Bare Earth scenarios S4 and S5, these maxima were significantly displaced to the southeast quadrant of the berm DEM, which may not be as relevant as the maximum value at the center of the DEM, so this center maximum value is annotated and marked with a black circle, as well.

To provide some insight into the inundation process, East-West transects of eta (referenced to MHW) were also constructed at the latitude of each of these maximum values; snapshots at selected times are presented in Figures 9-12. Note the subsidence that occurs on the coast and at the berm one second after the earthquake occurs, and the reflected wave propagating West from the berm for Scenarios 1 and 3 and from high ground about 3-4 km to the east of the berm site in the Bare Earth Scenarios 4 and 5 (see Figure 9).

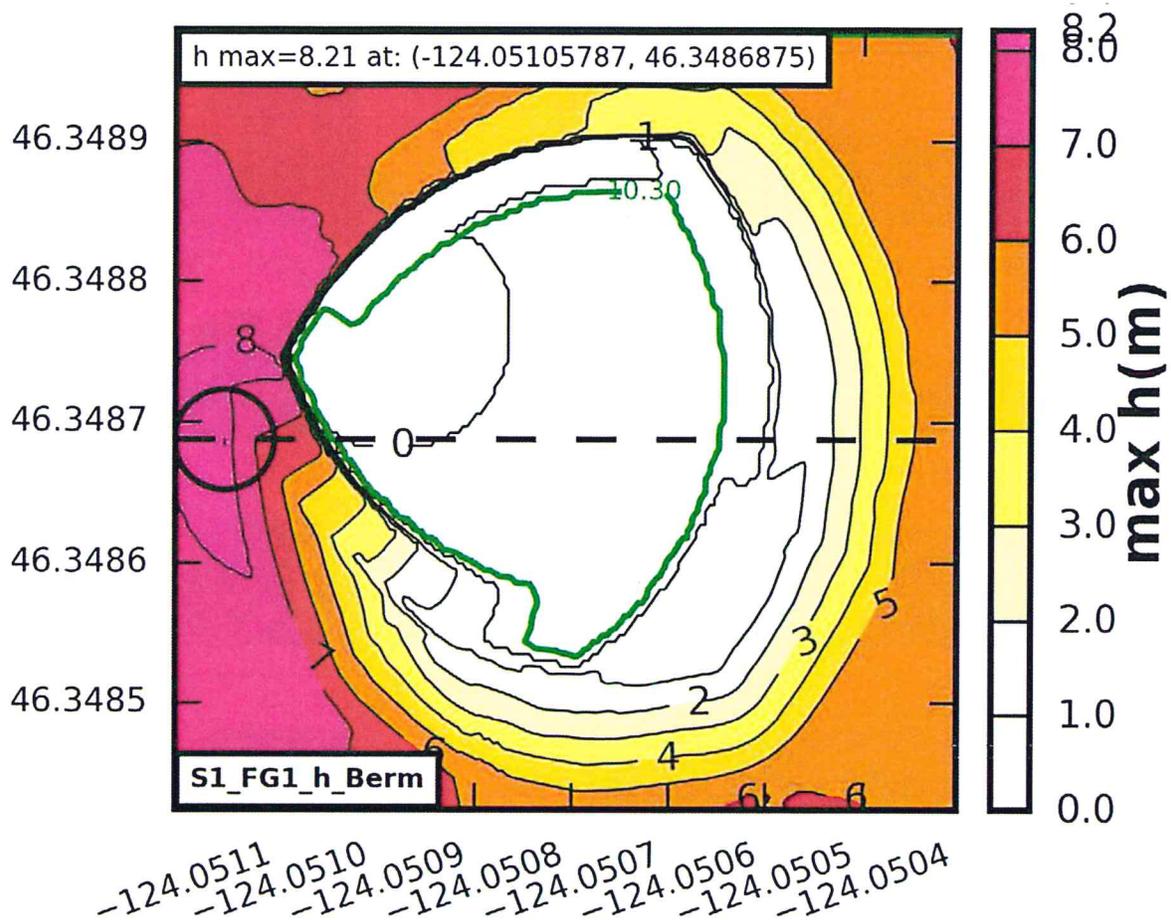


Figure 5a. S1 maximum flow depth values (referenced to the underlying topography) at the berm recorded at each computational grid cell over the duration of the simulation. The value and geographical position of the largest maximum is annotated and also marked by a black circle. The dashed line marks the latitude of the East-West inundation transects presented below in Figure 5b. Note that the apparent flooding of the top is an artifact of the numerical solution which produces a thin film of overtopping water driven by extreme, nonphysical, current speed values at the berm wall. Numerical experiments indicate that the maximum value of 8.21 m located west of the berm wall is sufficiently stable for computing an estimate of the minimum required berm height (Table 4).



Figure 5b. S1 East-West transects of eta (referenced to MHW) at the latitude of maximum inundation depth as indicated by the dashed line in the top panel of Figure 5a.

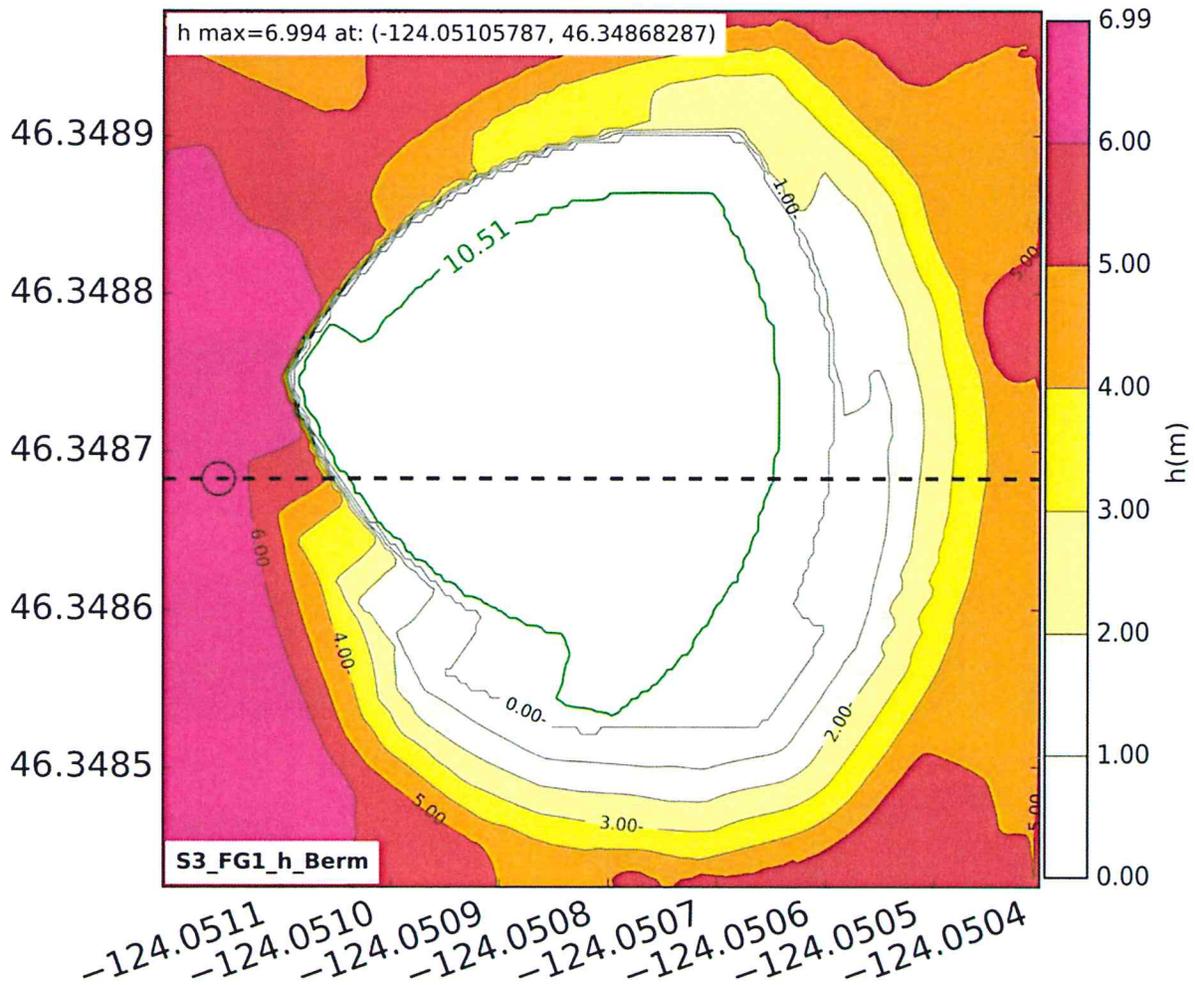


Figure 6a. S3 maximum flow depth values (referenced to the underlying topography) at the berm recorded at each computational grid cell over the duration of the simulation. The value and geographical position of the largest maximum is annotated and also marked by a black circle. The dashed line marks the latitude of the East-West inundation transects presented below in Figure 6b.

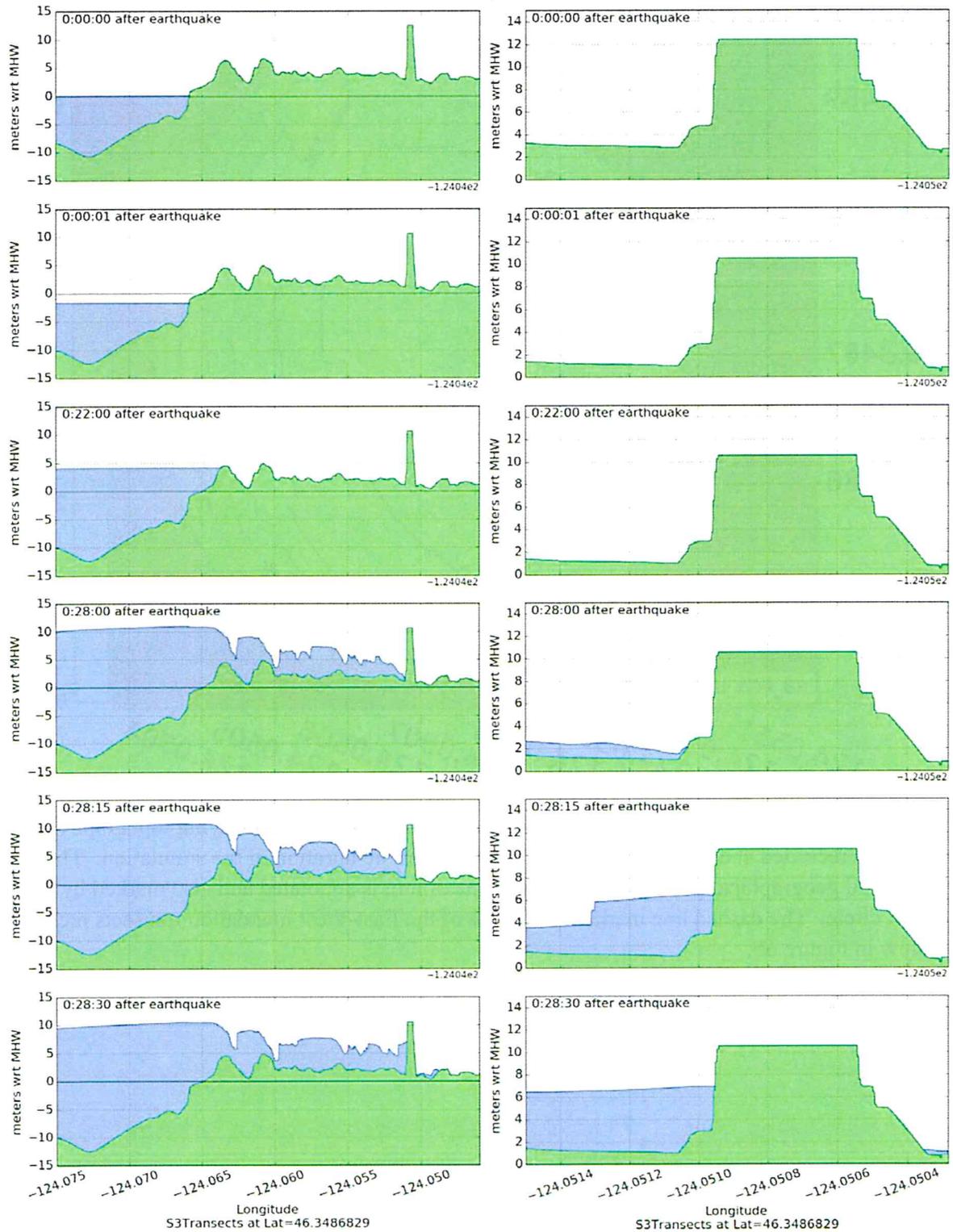


Figure 6b. S3 East-West transects of eta (referenced to MHW) at the latitude of maximum inundation depth as indicated by the dashed line in the top panel of Figure 6a.

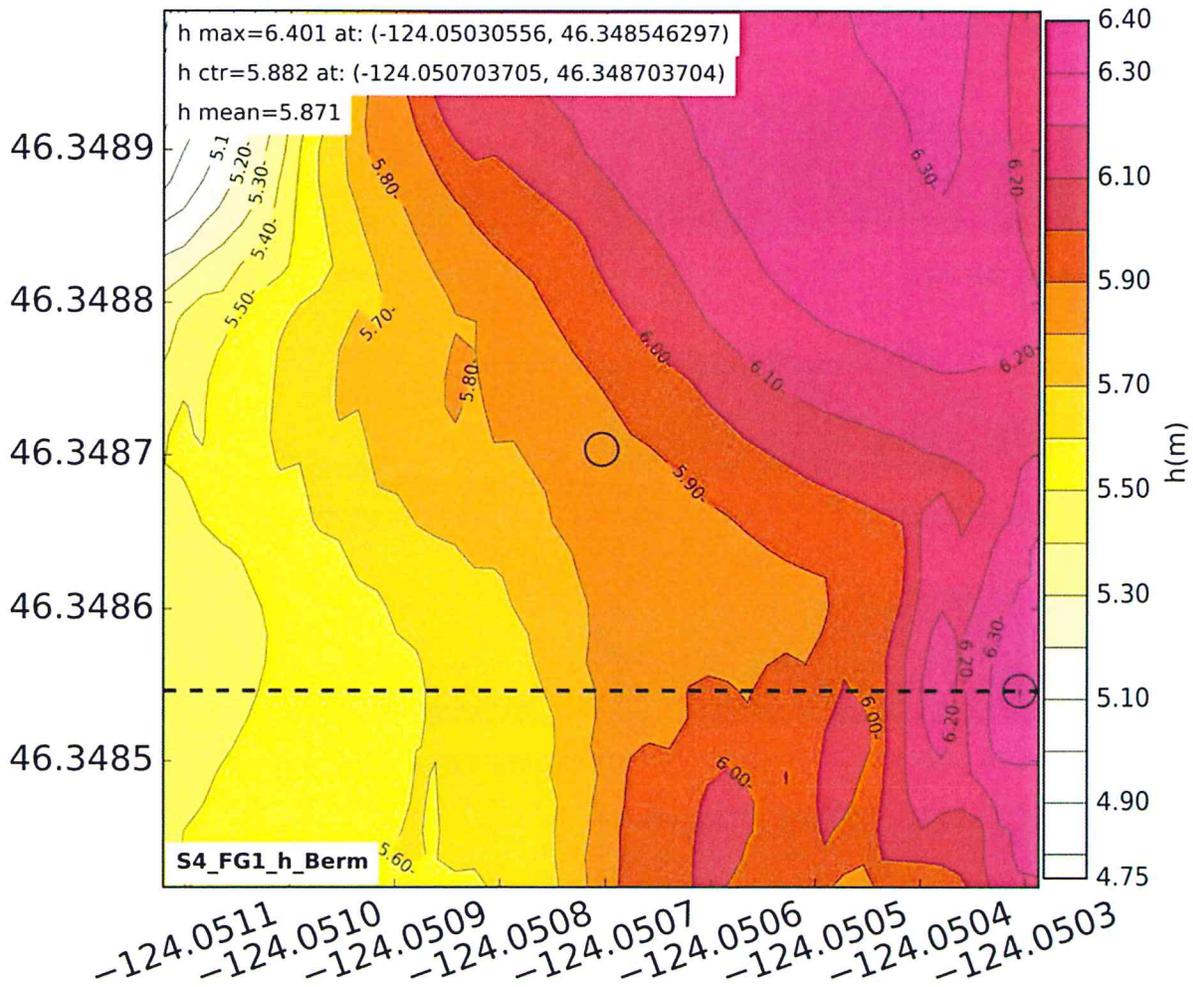


Figure 7a. S4 maximum flow depth values (referenced to the underlying topography) at the berm site recorded at each computational grid cell over the duration of the simulation. The value and geographical position of the largest maximum and the maximum at the center of the berm area are annotated and also marked by black circles; the mean value is also provided in the annotation. The dashed line marks the latitude of the East-West inundation transects presented below in Figure 7b.

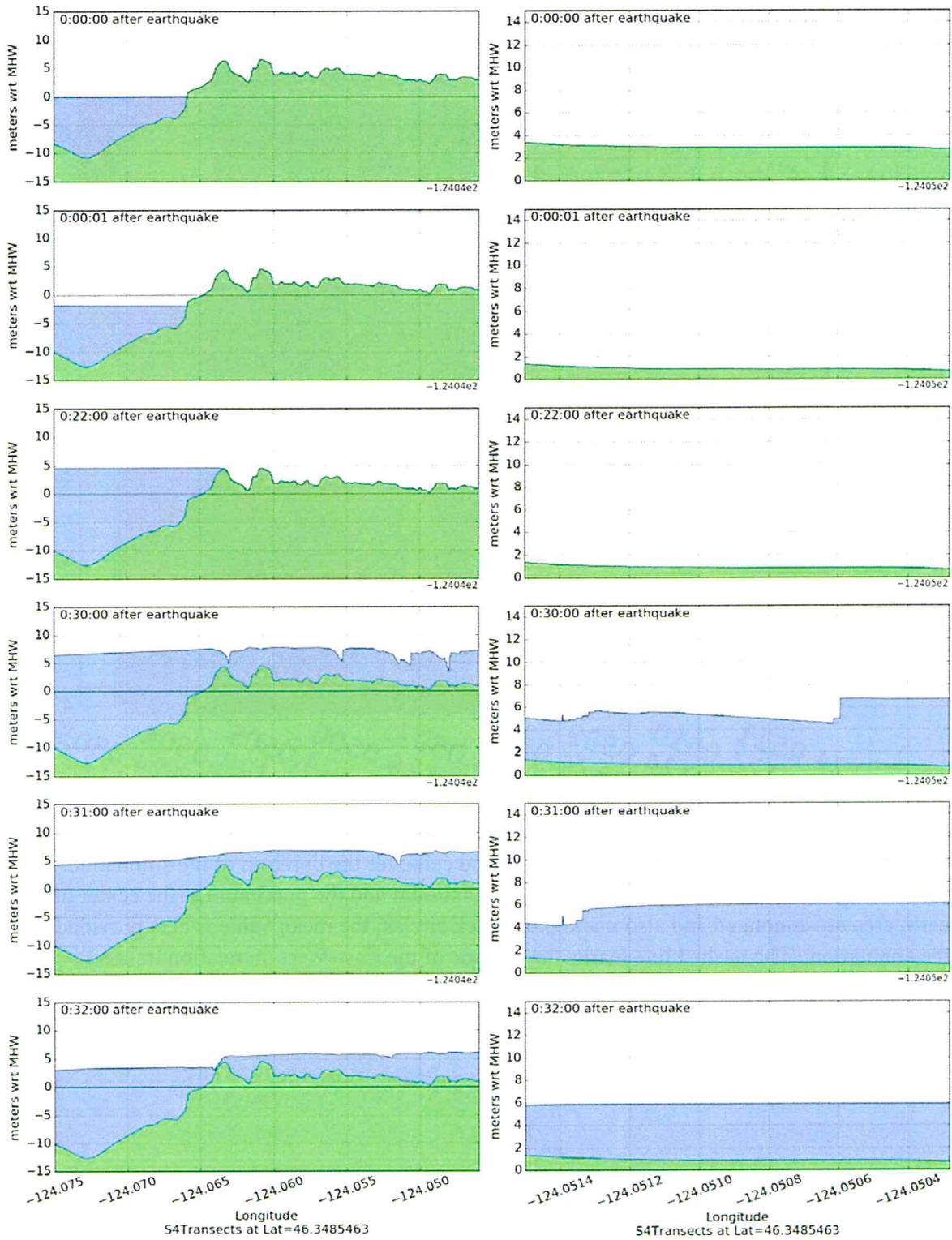


Figure 7b. S4 East-West transects of eta (referenced to MHW) at the latitude of maximum inundation depth as indicated by the dashed line in the top panel of Figure 7a.

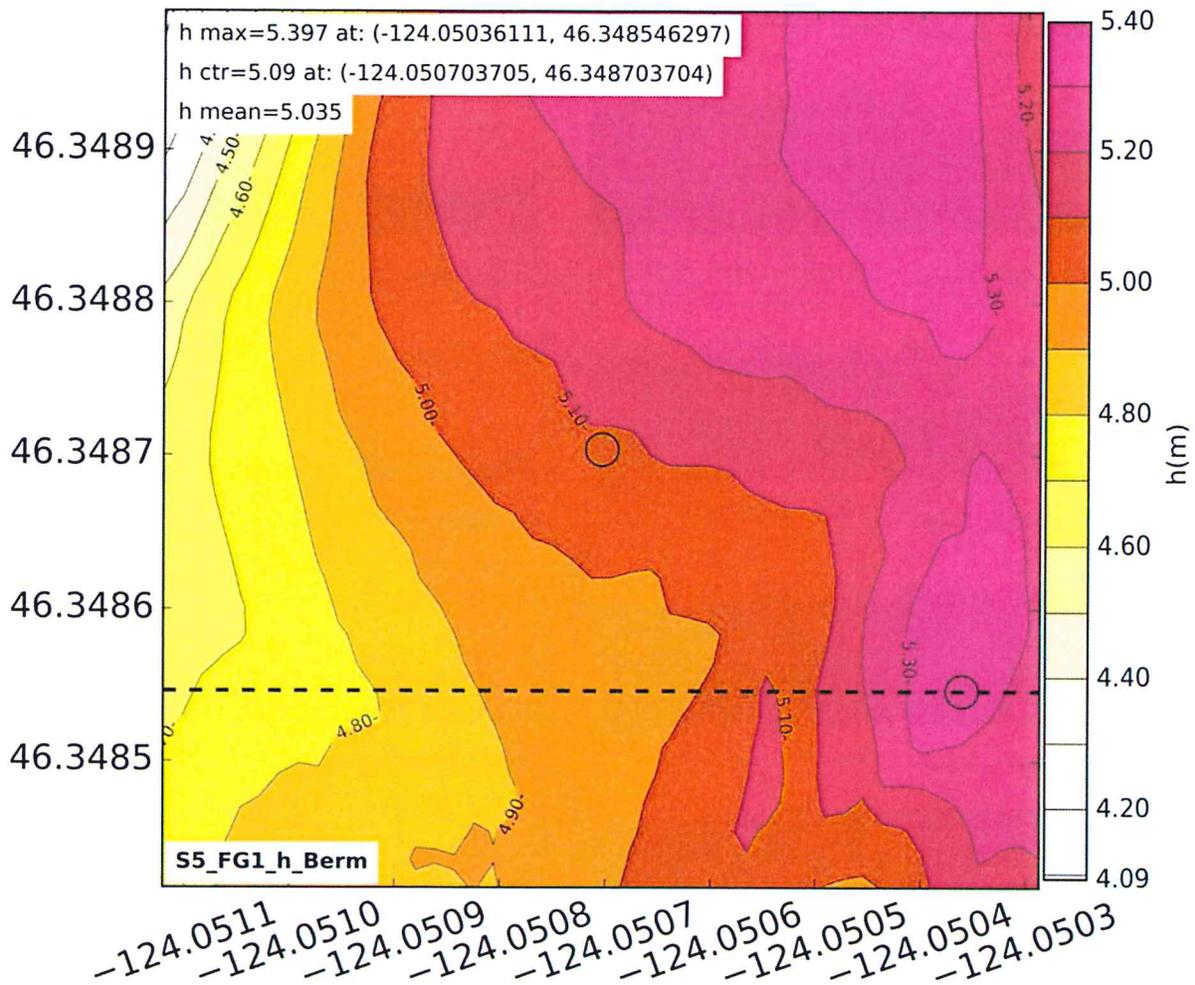


Figure 8a. S5 maximum flow depth values (referenced to the underlying topography) at the berm site recorded at each computational grid cell over the duration of the simulation. The value and geographical position of the largest maximum and the maximum at the center of the berm area are annotated and also marked by black circles; the mean value is also provided in the annotation. The dashed line marks the latitude of the East-West inundation transects presented below in Figure 8b.

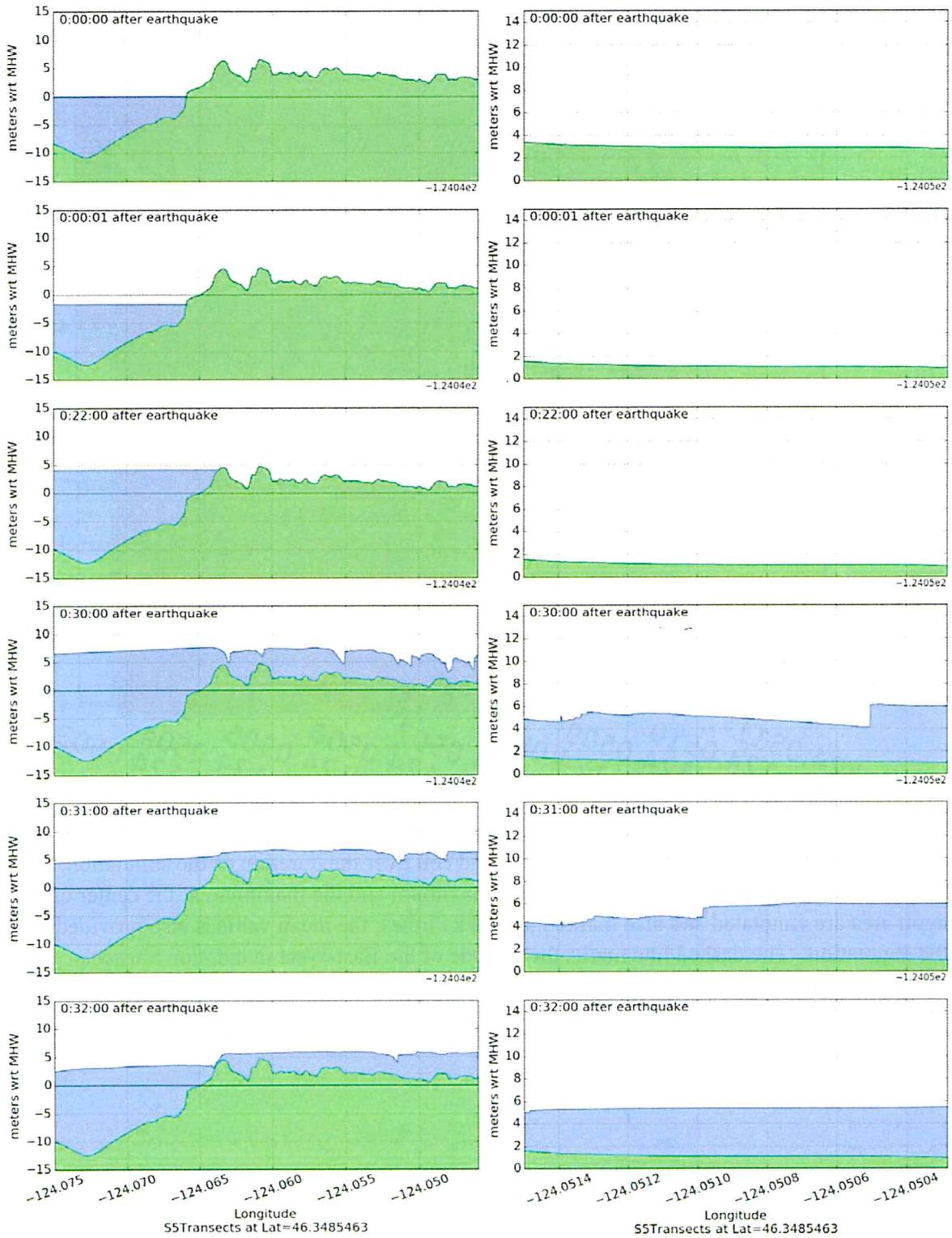


Figure 8b. S5 East-West transects of eta (referenced to MHW) at the latitude of maximum inundation depth as indicated by the dashed line in the top panel of Figure 8a.

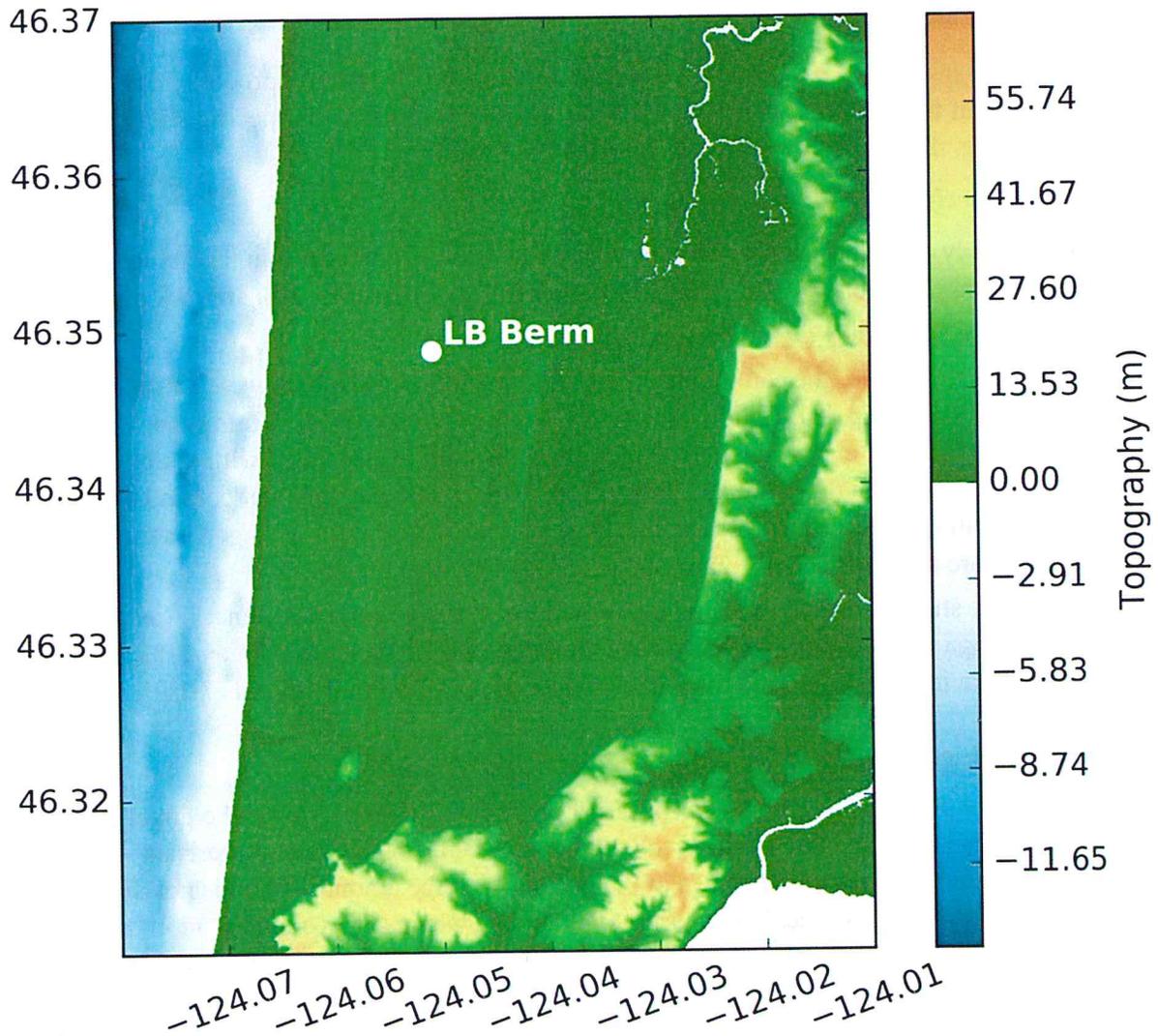


Figure 9. Topography of the Long Beach area. Note the high ground about 3-4 km to the east of the berm location. The reflected tsunami from this high ground can be seen propagating west in the transects of Figures 7b and 8b at 30-31 minutes after the earthquake.

Uncertainties and Limitations

Numerical models do not produce perfect simulations of any natural process. Here we discuss some of the uncertainties and limitations most important to this specific study and, where possible, their probable influence on the model output.

Source Specification

This is likely the largest source of uncertainty in the study. Variations in the value of certain earthquake parameters can produce large differences in the subsequent tsunami flooding.

Earthquake Magnitude and Recurrence Interval

In general, the greater the earthquake magnitude, the larger the initial wave amplitude (but see the discussion of slip distribution uncertainty, below, for exceptions to this general rule). With regard to the CSZ event, however, larger events would be associated with larger recurrence intervals than the estimated 1990-3300 years (R. Witter, personal communication). In addition, Witter et al. (2011) estimate that "...the L1 scenario captures 95 percent of the hazard and more severe events are extremely unlikely."

In this new study we again modeled the tsunami with the original L1 scenario (using the new berm design and location), and also used the amplified L1 scenario with an 11% increase in amplification in order to exceed the eta100 values as specified in the ASCE 7-16 guidelines.

Earthquake Slip Distribution

The vertical displacement of the earth's crust presented in Figure 1 (a) is the direct result of a Pacific oceanic tectonic plate slipping (or subducting) beneath the North American continental plate, deforming both plates in the process. But the amount of slip is not distributed evenly on the common surface, known as the fault plane, where the two plates are in direct contact. There are patches on the fault plane, known as asperities, in which the two plates are more tightly locked by friction or protrusions of one plate into the other. But the relentless movement of the tectonic plates over decades and centuries continues to build up stress until the rock in the asperity region breaks and the plates slip past one another, releasing a local maxima of energy.

A significant amount of earthquake energy is released by the slip in asperities, which concentrates the energy in a relatively small patch. As a consequence, details of the slip distribution can make a significant difference in the initial amplitude of a tsunami; for example, if the slip is distributed evenly over the entire fault plane, then the initial tsunami amplitude will be about half the amplitude of a tsunami generated by slip distributed evenly over half of the fault plane (if the earthquake magnitude is the same in each case). In particular, high slip values concentrated in an asperity region are associated with large values of vertical displacement of the ocean floor and a higher initial tsunami wave in the region.

Thus, the location of a coastal community relative to an asperity and the associated high wave region can have a direct effect on the severity of flooding in the community. Details of the near-field slip distribution for the CSZ scenario L1 can strongly affect the degree of Long Beach inundation. For example, offshore of Long Beach there is a maxima of 10-12 m in

crustal deformation and the initial tsunami waveform (Figure 1(a)); if this maxima was located closer to or farther from Long Beach, the inundation would likely increase or decrease, respectively. Similarly, if the concentration of slip (and therefore earthquake energy) resulted in a larger or smaller maximum value, then a corresponding increase or decrease in flooding would be expected. However, it is not possible to make a reliable prediction of slip distribution at this level of detail, and conducting numerical experiments to estimate the sensitivity of flooding to such changes is beyond the scope of this study.

Landslide sources

This study did not include modeling of local landslides that are triggered by earthquake shaking. For the near-field CSZ events considered in this study, submarine landslides occurring offshore Long Beach could increase the severity of flooding. If the earthquake triggers a very large submarine mass failure on the continental slope then this could increase wave amplitudes substantially.

Model Physics

Several important geophysical parameters must be set in the GeoClaw software, and some physical processes are not included in these simulations, which use the two-dimensional shallow water equations. These are discussed below along with their potential effect on the modeling results.

Tide Stage

The simulations were conducted with the background sea level set to MHW. This value is conservative, in the sense that the severity of inundation will generally increase with a higher background sea level. Larger tide levels do occasionally occur, but the assumption of MHW is standard practice in studies of this type.

Sea Level Rise

In this study we have not explored the effect that sea level rise would have on the results. These could be significant over the expected lifetime of the berm. As a simple approximation, it might be expected that if sea level (and hence MHW) is increased by some amount then the flow depth at the berm location will increase by roughly the same amount. This is probably a good approximation for small sea level rise (a few cm) but is not true in general since the onshore fluid dynamics is highly nonlinear. New simulations would be required to properly assess the effect of a larger rise in sea level.

Friction

Manning's coefficient of friction was set to 0.025, a standard value used in tsunami modeling that corresponds to gravelly earth. This choice of 0.025 is conservative in some sense, because the presence of trees, structures and vegetation to the west of the Long Beach Elementary School campus would justify the use of a larger value, which might tend to reduce the inland flow. On the other hand, larger friction values can lead to deeper flow in some areas, since the water may pile up more as it advances more slowly across the topography. A

sensitivity study for the berm location has not been performed.

Tsunami modification of bathymetry and topography

Severe scouring and deposition are known to occur during a tsunami, undermining structures and altering the flow pattern of the tsunami itself. Again, this movement of material requires an expenditure of tsunami energy that tends to reduce the inland extent of inundation. On the other hand, if natural berms or ridges along the coastline (or man-made levies or walls) are eroded by the tsunami, then some areas can experience much more extensive flooding. There is no erosion or deposition included in the simulations presented here.

Structures west of the berm

Buildings west of the berm were not included in the simulations. The presence of these structures will alter tsunami flow patterns and generally impede inland flow. To some extent the lack of these structures in the model is therefore a conservative feature, in that their inclusion would generally reduce inland penetration of the tsunami wave. However, as in the case of the friction coefficient, impeding the flow can also result in deeper flow in some areas. It can also lead to higher fluid velocities, particularly in regions where the flow is channelized, such as when flowing up streets that are bounded by buildings.

Incorporating existing buildings (given the appropriate data) into the two-dimensional shallow water wave model would be possible, but these equations are generally not adequate for accurately modeling the complex flow through a built environment. The flow is generally fully three-dimensional and turbulent around structures.

Three-dimensional modeling is beyond the scope of the ASCE 7-16 requirements, and has not been performed in this study. Modeling tsunami flow around structures is still very much a research topic in the tsunami modeling community. Another fundamental difficulty with incorporating existing structures into a tsunami simulation is that many structures will be knocked down by the force of the tsunami. At this point, they are no longer fixed obstacles to the flow and instead become debris. Accurately modeling this process for a large set of buildings is well beyond current tsunami modeling capabilities.

Debris

Large tsunamis inevitably create fields of debris that act as battering rams, multiplying the destructive impact. Smaller debris and entrained sediment increases the density of the fluid, potentially leading to greater hydrodynamic forces on structures such as the berm. On the other hand, the process of creating and carrying debris also requires the expenditure of tsunami energy, which would tend to reduce the inland extent of the inundation. In this study we have not attempted to incorporate debris.

Hydrodynamic Equations

The two-dimensional shallow water equations used in GeoClaw are generally a good model for simulating tsunamis with long wave lengths, such as those generated by a CSZ event, and have been found to be a reasonable model for inundation on bare earth. The GeoClaw model has been validated by the NTHMP for tsunami studies of this nature.

However, it is not clear that the shallow water equations are adequate to model the interaction of the flow with a small scale, steep-walled feature such as this berm, as discussed above. Ideally, a 3-dimensional fluid model would be coupled to GeoClaw in order to more accurately model the response around the berm. Such an effort was beyond the scope of this study.

We believe that the GeoClaw results give a reasonable estimate of the flooding depth around the berm on the otherwise bare earth topography used here. This topography is relatively flat in the region around the berm and the resulting flow is relatively smooth except for hydraulic jumps at the wave front and in the reflections from the berm itself. These jumps can be well captured by shallow water equations and more complex three-dimensional effects may be minimal.

We stress, however, that these simulations ignore other existing structures (including the large school building just northwest of the berm) that could have a significant effect on the fluid dynamics.

Summary and Conclusions

Four simulations were conducted for the purpose of testing compliance of the design of the Long Beach Elementary School Berm with FEMA (2012) and ASCE (2017) criteria for the recommended minimum berm height. The scenarios represent four possible combinations of an earthquake source pair (L1 and L1x1.11) and the presence or absence of the Berm DEM in the simulation (Bare Earth or Berm).

The results indicate that the berm design was marginally compliant only for the (L1, Bare Earth) scenario that embodies the FEMA (2012) criteria, for which the berm was, in fact, designed.

We thus conclude that if it is a priority to comply with ASCE 7-16 guidance that is expected to be adopted in the future, then either the current berm design height must be increased or the berm must be modified or re-designed.

An important caveat to this conclusion is that the ASCE 7-16 criteria governing the recommended minimum structure height are not entirely clear. This is especially true in the context of hydrodynamic models such as GeoClaw that provide two-dimensional solutions of tsunami flow depth and other parameters. In particular, more detailed guidance is needed on the following issues that were encountered during the course of this study.

- eta100 criteria for maximum offshore wave amplitude at the 100 m isobath are apparently still under discussion by the ASCE 7-16 Panel
- physical/engineering reasoning regarding the application of safety factors (or not) to results of tsunami/structure interaction modeling
- significant spatial variability of the maximum inundation depth in the vicinity of the structure

Judgements made on each of these issues have a significant effect on the minimum berm height computation and, therefore, on the determination of whether a structure is or is not compliant with the ASCE 7-16 criteria.

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Acknowledgement

Support for this study was provided through Washington Department of Emergency Management, a FEMA grant to the City of Long Beach, and City of Long Beach matching funds.

Appendix A. ASCE 7-16 Earthquake Source Requirements

Section 6.2 defines a Maximum Considered Tsunami (MCT) as

MAXIMUM CONSIDERED TSUNAMI: *A probabilistic tsunami having a 2% probability of being exceeded in a 50-year period or a 2,475-year mean recurrence interval.*

This mean recurrence interval falls within the range of the L1 earthquake mean recurrence interval of 1990-3300 years.

The offshore amplitude of the MCT, is defined as

OFFSHORE TSUNAMI AMPLITUDE: *Maximum Considered Tsunami amplitude relative to the Reference Sea Level, measured where the undisturbed water depth is 328 ft (100 m).*

where Reference Sea Level is

REFERENCE SEA LEVEL: *The sea level datum used in site-specific inundation modeling that is typically taken to be Mean High Water Level (MHWL).*

This offshore tsunami amplitude determines compliance of the offshore wave amplitude with ASCE 7-16 as follows

6.7.5.2 Direct Computation of Probabilistic Inundation and Runup. *It shall be permitted to compute probabilistic inundation and runup directly from a probabilistic set of sources, source characterizations, and uncertainties consistent with Section 6.7.2, Section 6.7.4, and the computing conditions set out in Section 6.7.6. The offshore wave amplitudes computed shall not be lower than 80% of the wave amplitudes given in Fig. 6.7-1.*

Figure A1 reproduces ASCE 7-16 Figure 6.2-1, which graphically illustrates the definitions of the maximum tsunami wave amplitude at the 100 m isobath. The symbol H_T is used in ASCE 7-16 to refer to this parameter but instead of the symbol H_T we here adopt the designation “eta100”; this is because the letter H is frequently used for the peak-to-trough wave “height”, also illustrated in Figure A1 and the amplitude — i.e., the vertical sea surface deviation from a reference sea level — is frequently denoted by the Greek letter “eta” (see, for example, equation 6.7-1 of ASCE 7-16).

Because the crucial last sentence of 6.7.5.2 is somewhat ambiguous, WA State contacted the authors of ASCE 7-16 for clarification; this resulted in the interpretation used in this study — namely, that compliance is achieved if the maximum tsunami wave heights associated with the L1 source at ASCE 7 stations located offshore in 100 m water depth that are within $\pm 22.5^\circ$ bearing from the Long Beach Berm site are equal to or greater than 80% of the value of each of the individual ASCE 7-16 values. However, at a recent ASCE Panel meeting, a recommendation was discussed to use the average ASCE 7-16 value in the $\pm 22.5^\circ$ sector, rather than each of the individual ASCE 7-16 values. If adopted, this recommendation would

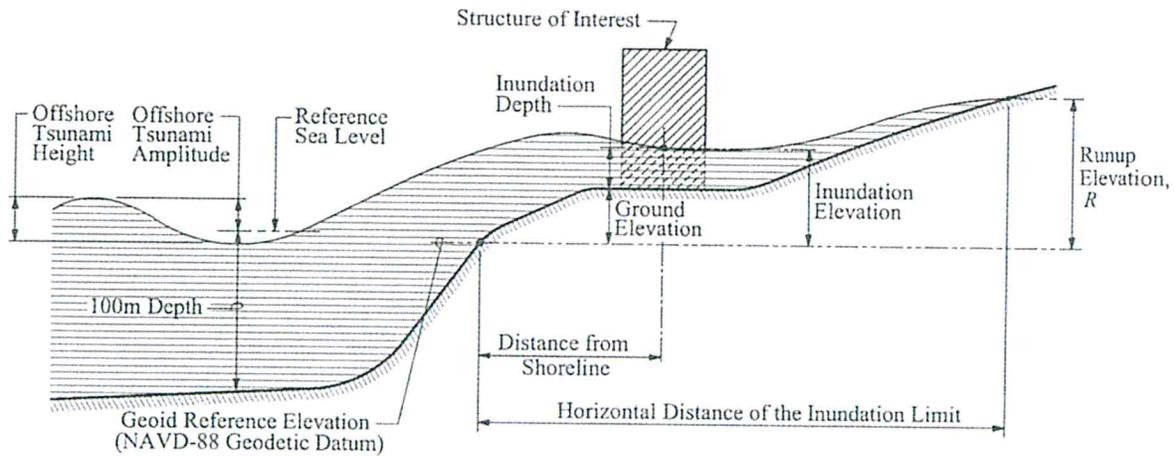


Figure A1. Reproduction of ASCE 7-16 “FIGURE 6.2-1 Illustration of Key Definitions along a Flow Transect in a Tsunami Design Zone”

result in a smaller offshore wave height requirement. Apparently, this matter continues to be under discussion, so we must consider this important criteria to be unclear and/or subject to change.

Nonetheless, we addressed the offshore wave amplitude guidance using the understanding by WA State of the ASCE 7-16 criteria, as stated above. In particular, a GeoClaw tsunami simulation with the L1 source was conducted to generate time series of the wave amplitude, η_{100} , at the ASCE stations and it was found that some GeoClaw η_{100} values fell below the ASCE 7-16 η_{100} values. Therefore, to satisfy the ASCE 7-16 η_{100} criteria, the deformation field of L1 was multiplied by the factor 1.11. Note that this increased both the maximum wave amplitudes and the degree of subsidence by 11 %. Figure A2 presents the results of this modification of L1.

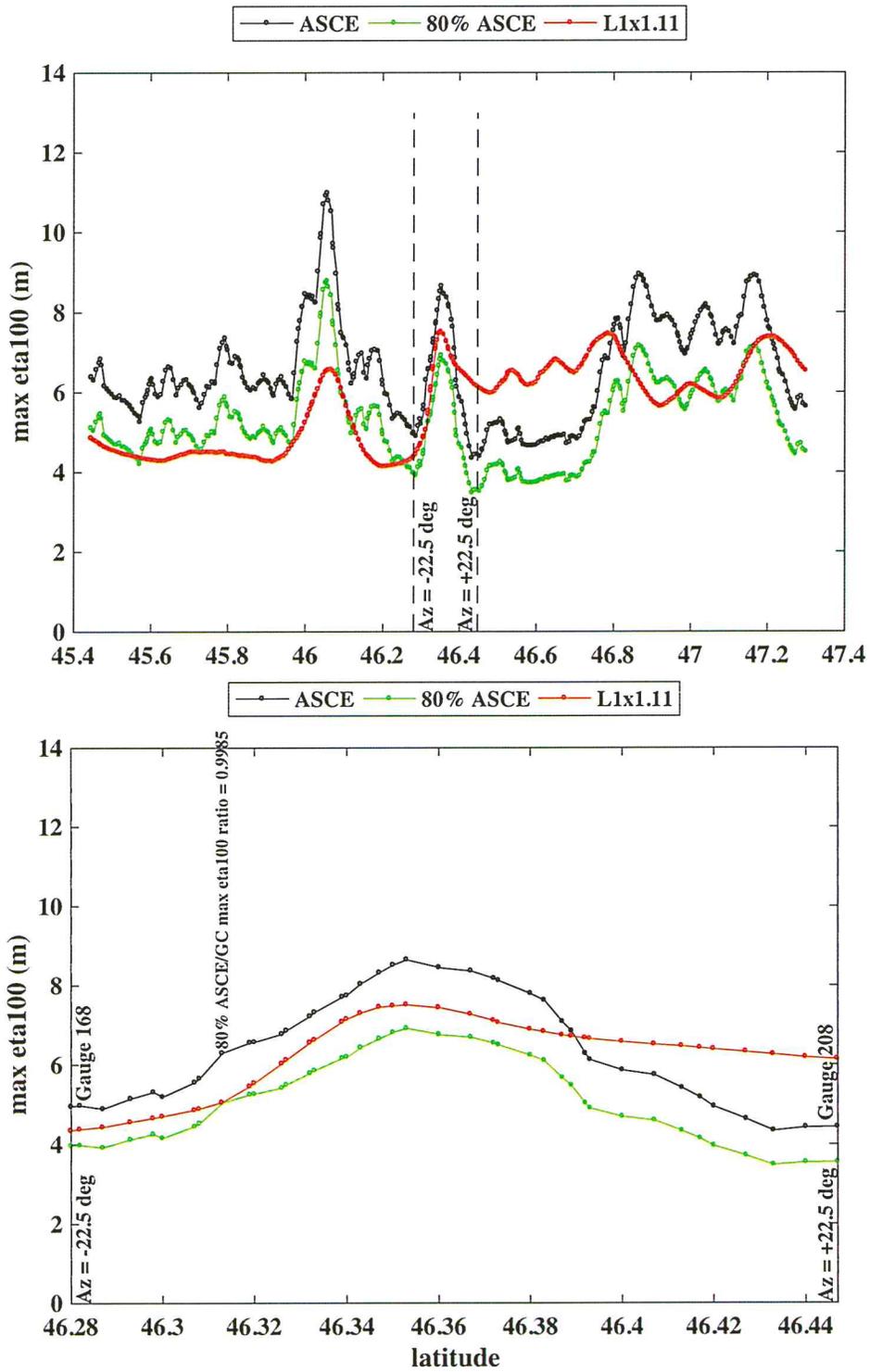


Figure A. **Top:** eta100 for source L1x1.11 and the ASCE 7-16 Geodatabase.
Bottom: Zoomed view of the $\pm 22.5^\circ$ sector with vertex at the Long Beach berm

Appendix B. Online Model Data Products

As part of the deliverables, we have worked with WA DNR to develop the following standard products to be used in the development of additional derived products and to be archived for future distribution and use.

Digital text files

1. Maximum value data (See <http://www.clawpack.org/fgmax.html#fgmax>), including the following files:

fgmax_grid1.data: *grid details, geographical extent, resolution, etc.*

fort.FG0001.valuemax: *maximum values of tsunami parameters*

fort.FG0001.aux1: *grid bathymetry*

xxxxx.data :*model simulation parameter options selected in “setrun.py” (See http://www.clawpack.org/v5.4.1/setrun_geoclaw.html)*

2. Gauge data (See <http://www.clawpack.org/gauges.html?highlight=gauge>)

3. Other study-specific files that might be needed.

Graphical products (See <http://www.clawpack.org/v5.4.1/setplot.html>)

1. Maximum values

Plan view plots

Transects

2. Animations

Computational region and sub-regions of interest

fgmax grids

3. Other study-specific graphics that might be needed.

April 9, 2018

Chief Bonney
Long Beach Fire Department
701 Washington Ave N
PO Box 310
Long Beach, WA 98631

Chief Bonney

Washington Surveying and Rating Bureau (WSRB) has completed its evaluation of the fire protection capabilities of your community as they relate to fire insurance rating. It is our pleasure to inform you that the Protection Classification (PC) for Long Beach has improved from Protection Class 7 to Protection Class 6, effective August 1, 2018.

A Protection Class (PC) 6 rating will apply to dwelling and commercial properties located within five road miles of a responding fire station and having standard fire hydrant distribution and water supply. Properties in the community not meeting the above requirements will receive a different PC rating. Protection Class ratings for individual dwelling and commercial properties are available free of charge by calling WSRB Customer Service at (206) 217-0101 or emailing customerservice@wsrb.com. We recommend residents of your community contact their insurance agents to determine the relative effect this new community protection classification will have on their insurance premiums.

We wish to thank you for the cooperation during the evaluation.

Please find enclosed a copy of the new Protection Class Report. This report shows the various items evaluated and points associated with each item. The points total for all items determines the Protection Class of the community.

This survey was not conducted for property loss prevention or for life safety purposes. The purpose was to gather information needed to determine a fire insurance relevant Public Protection Classification that may be used to develop fire insurance rates or loss costs. Our evaluation criteria incorporate many national recognized standards, such as those developed by NFPA and AWWA, and has been filed with and approved by the Washington State Office of Insurance Commissioner.

If you have any questions, please let us know.

Sincerely,



Eric Cunningham
Fire Protection Analyst
Seattle Office 206.273.7183
eric.cunningham@wsrb.com

Mayor of Long Beach

9 Best Memorial Day Weekend Getaways in Washington

BY K.C. DERMODY

With its magnificent, diverse terrain, Washington State offers a wealth of fantastic travel destinations. You'll find everything from breathtaking coastal scenery and wild driftwood-strewn beaches to dramatic mountains and glistening lakes with charming towns tucked in between. If you're trying to make through the many options here, we've narrowed it down for you by providing some of the very best escapes for Memorial Day weekend in Washington.



Credit: Bigstock.com

SPONSORED

Long Beach Peninsula

Long Beach (Nearby Hotels)

Memorial Day weekend is the official kick off of summer in Long Beach which sits along the southwest coast. The self-proclaimed 'World's Longest Beach,' offers endless activities on the sand, from beach combing, peaceful strolls and horseback riding to kite flying. In fact, Long Beach is considered one of the best spots to fly a kite on the planet. It also hosts a World Kite Museum and Hall of Fame, and all sorts of family-friendly entertainment, including carnival rides, face painting, games, bumper cars and a carousel. You can even rent a bicycle built for two or a three-wheeler to cruise the beach.



1 2 3 4 5 6 7 8 9



LBPVB –Monthly Destination Marketing Report March 2018

Web Traffic: Visits -27,344 Unique Visitors – 25,221 80.3% new visitors. Page views – 69,838
5,484 referrals to member websites, 1359 referrals to “Book Now”, 1082 to “Featured Listings”

Blogs

Fantastic Crab and Where to Find Them (March 12, 2018)

<https://funbeach.com/crab-season/>

Pageviews: 477

Get Behind the Scenes at the Tokeland North Cove Art and Studio Tour (March 20, 2018)

<https://funbeach.com/tokeland/>

Pageviews: 76

Experiencing the Gray Whale Migration on the LBP (blog refresh, March 29, 2018)

<https://funbeach.com/whale-watching/>

Pageviews: 218

Social Media : facebook: 12,943 likes as of 3-31-18. Gained 63 new Likes in March.

12,427 followers (+79) Traffic to website 806 unique

Top Posts:

Have you explored Beard’s Hollow? **7,977 reach (12% engagement)**

Coastal Forest Loop feels like a fairy tale **6,332 reach (10% engagement)**

Tourism Ambassador of the Year **4,785 reach (5% engagement)**

Washington State Parks Turns 105 **4,332 reach (3% engagement)**

Have you visited the North Head Lighthouse? **3,739 reach (9% engagement)**

Twitter: * 1,269 (+10) followers as of 3-31-18 Total impressions in March 41.6K.

Instagram: * 1,195 (+40) followers as of 3-31-18. Mar 17- 16.8K. Likes: 3.9K

Consumer Direct E-Newsletter Delivered to about 18,433 subscribers. Open rate of 22.4% and 18.3% click through rate. The Coast is Calling! <http://myemail.constantcontact.com/The-coast-is-calling-.html?soid=1115090527827&aid=a3MB8icdnXc>

February e-news delivered to 18,490

- Opened by 19.4%. Clicked by 17.1%

January e-news delivered to 18,543

- Opened by 19.5%. Clicked by 16.2%

-

*Special email for runs/races on LBP: sent to 1,146, open rate 25%, click rate 18%

Public Relations : Earned Media: 1889 Magazine, x 3 RV 365 Life, The Foxes Photography, Table Talk NW, CaseyRayPhotography x 2, Audubon.org, PNW Pixie, Tripping.com, Seattle.Curbed.com, Best Things Washington, The Daily World x 3, KXRO, King5 News, Washington Trails Association, Yelmonline.com, ExperienceWA.com, KXLY, Crosscut.com, Book – The Magic of Cape Disappointment, The Seattle Times, Red Tricycle, Washington State Parks enews x 3, Q13 News, Business Examiner, AAA Journey, Only in Your State, Northwest Travel & Life magazine, The Daily News, KUOW, Explore Washington State, KXRO, The News Tribune, Sunset.com, Food, Wine, Travel Magazine, Woodworking Network, TravellLife.com

Earned Instagram: top 3 had 155,735 followers and posts from our area had 9,295 likes

Press Visits:

360 Video

We continue to get traffic to our 360 videos. Our enews now has a permanent spot for these virtual tours, and I'm dropping them into appropriate spots on our website to ensure continued gain in views.

YouTube Views: 4,673

Facebook Video Views: 5,057

Facebook Post Reach: 38,833

Visitors Center – 1,136 in March., which down 20% from March. of 2017. Year to date there were 2,321 visitors to Seaview VC, which is down about 13% from 2017. Satellite visitors center in Chinook School Events Center open Thurs. – Sun. 10am – 4pm had 30 visitors in March. and has had 70 visitors this year to date.

Collateral Production and Distribution - 7,161 pieces of VB produced collateral distributed in addition to digital/electronic copies distributed/downloaded via social media and web.

Leads fulfillment - Oregon Coast Visitors Association 575

Tourism Metrics -

Unincorporated Pacific County March collections are about 31% higher than March of 2017. Year to date collections for unincorporated areas are up 10% from same period last year.

City of Long Beach lodging tax collections for March are up 17% from March of 2017, with year to date collections up nearly 27% over last year.

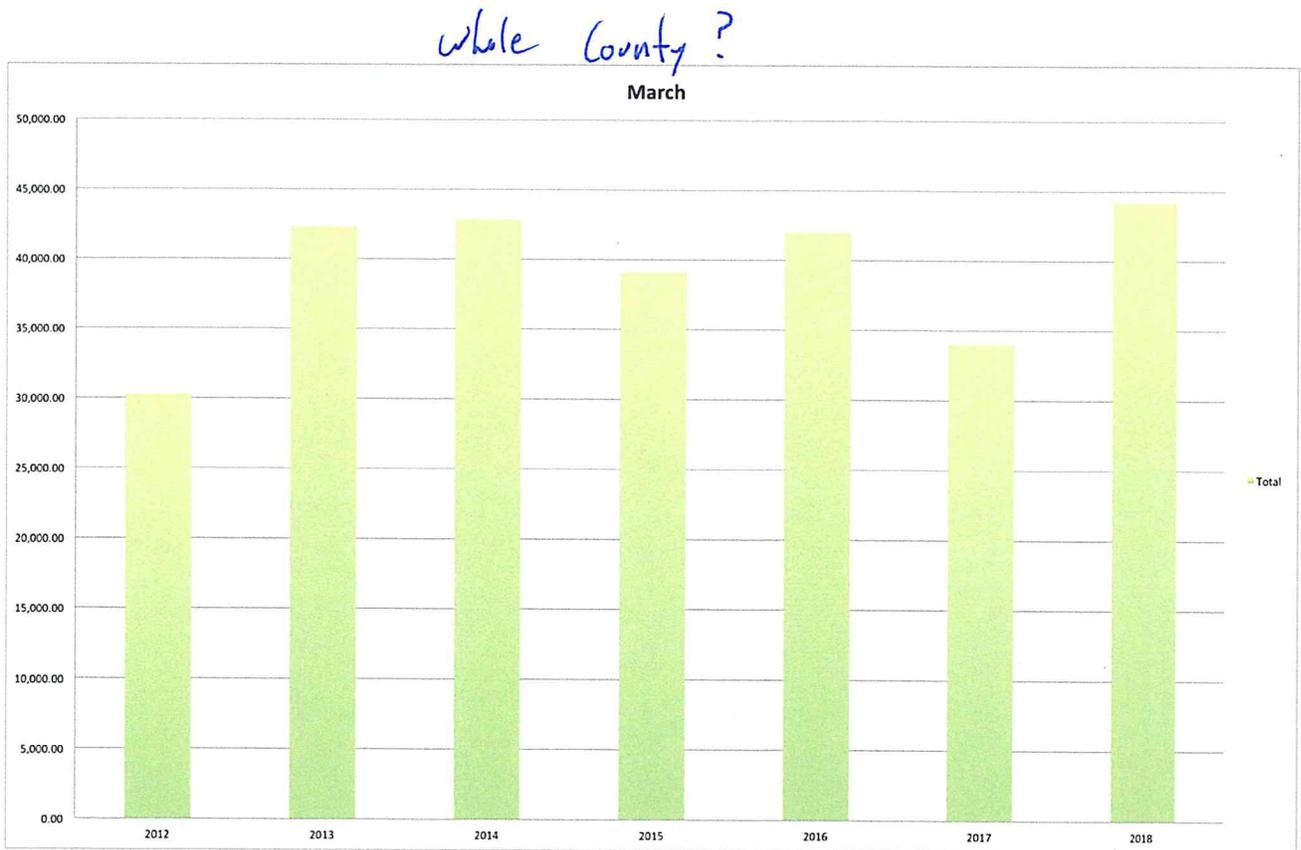
Ilwaco's March collections are up 10% over March of 2017 and year to date collections are up about 70%.

Raymond's years to date collections are up 93%

South Bend's year to date collection are down 5%.

Total collections for all areas of the county for the month of March are up 29% over March of 2017 and year to date collections for all areas are up 14% for the same period in 2017. This represents at least \$6 million in additional gross lodging sales in the first quarter of 2018.

One of our goals has been to grow tourism in Pacific County during the shoulder and off-season. The following graph shows the county wide lodging tax collections for the month of March since 2012. Collections for the month of March have grown by over 46% since 2012.



LB From 12-18 YTD = 66%