Oliver Allamby

From: Rich Lucia
Sent: Wednesday, August 6, 2025 9:22 AM
To: Cstaff
Subject: FW: Barrington Bridge Repairs 2025-02-078
Attachments: CRMC Public Comment_Response Letter_SIGNED_8.6.25.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Oliver

Please put in paes 2025-02-078

From: Justin Mateus <justin.mateus@crossmaneng.com>
Sent: Wednesday, August 6, 2025 9:11 AM
To: 'Kazem Farhoumand' <KFarhoumand@aiengineers.com>
Cc: Rich Lucia <rlucia@crmc.ri.gov>; Amy Silva <asilva@crmc.ri.gov>; 'Richardson, Alisa (DOT)' <Alisa.Richardson@dot.ri.gov>; 'Morris, Odetta (DOT)' <Odetta.Morris@dot.ri.gov>; 'Steven Cabral' <steven.cabral@crossmaneng.com>; 'Sana Shaikh' <sshaikh@aiengineers.com>; 'Michael Greer' <MGreer@aiengineers.com>
Subject: RE: Barrington Bridge Repairs 2025-02-078

Hi Kazem,

As you are aware, CRMC received public comments related to the Barrington Bridge project. Attached is a letter responding to those public comments.

Please note that CRMC and RIDOT have been copied on this email.

Thank you,
Justin

Justin G. Mateus, P.E.
Project Director

CROSSMAN ENGINEERING
Consulting Engineers & Surveyors

Rhode Island Office
100 Jefferson Boulevard, Suite 200
Warwick, Rhode Island 02888
(401) 738-5660 Ext. 18

Massachusetts Office
1 George Leven Drive, Suite 200
North Attleboro, MA 02763
(508) 695-1700

From: Steven Cabral <steven.cabral@crossmaneng.com>
Sent: Friday, July 11, 2025 10:25 AM

To: 'Kazem Farhoumand' <KFarhoumand@aiengineers.com>; 'Justin Mateus' <justin.mateus@crossmaneng.com>
Subject: FW: Barrington Bridge Repairs 2025-02-078

A few comments arrived from the public on the Barrington Bridge repairs. At a glance, the questions are for either AI or Pare to address. The questions are on the future navigability of the river due to potential loss of water depth and the potential change in flow/velocities. The flow questions would have been addressed in Pare's scour analysis. Pare should also attend the CRMC meeting to discuss the issues. Written replies in advance are needed for staff to complete there recommendations.

From: Rich Lucia <rlucia@crmc.ri.gov>
Sent: Friday, July 11, 2025 9:24 AM
To: Richardson, Alisa (DOT) <Alisa.Richardson@dot.ri.gov>; Steven Cabral <steven.cabral@crossmaneng.com>; Amy Silva <asilva@crmc.ri.gov>; Cstaff <cstaff1@crmc.ri.gov>
Subject: Barrington Bridge Repairs 2025-02-078

Alisa,
We have received correspondences (Representative of Warren Harbor Commission (Rock Singewald) and Atlantic Marine (Stephen Jane Mainella) with concerns submitted to CRMC. The concerns are Appendix C (modeling results) and Navigation concerns during and after repairs (SEE ATTACHED). it is suggested that RIDOT and/or the consultant(s) address these concerns prior to the Council hearing to avoid any delays etc. See Attached.
Thanks
Rich

August 6, 2025

Mr. Kazem Farhoumand, P.E.
Vice President
AI Engineers
10 Orms Street, Suite 320
Providence, RI 02904

RE: Response to Public Comments
CRMC Assent No. 2025-02-078
Rehabilitation of Bridge Group 15F –
Barrington Bridge No. 12301

Dear Mr. Farhoumand,

Crossman Engineering has received written public comments from the Coastal Resources Management Council (CRMC) related to the proposed Rehabilitation of Bridge Group 15F – Barrington Bridge No. 12301 (Assent No. 2025-02-078). Two comments were received; one from the Warren Harbor Management Commission and one from the Atlantic Marine. A copy of the comments can be found in **Appendix A**. I am writing this letter to address the concerns raised in the comments.

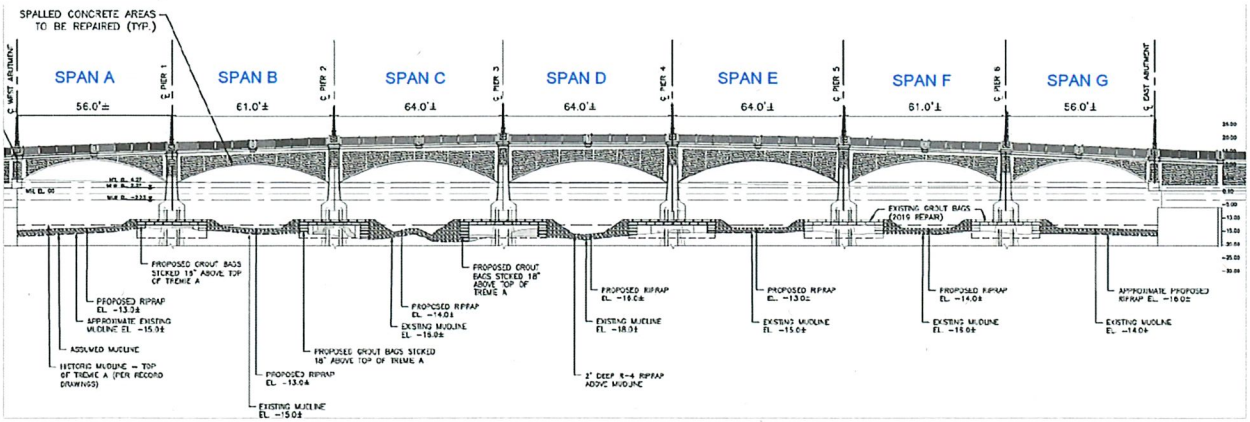


Figure 1: Elevation view of the Barrington Bridge, including existing and proposed conditions.

The comment from the Warren Harbor Management Commission sited two concerns; increased flow velocities under the bridge during storm surge events and shallow water depths under the outer-most arches. The Hydraulic Report prepared by Pare Corporation and included in the CRMC Assent Application as Appendix C is referenced in the comment, questioning the conclusion that "the installation of scour counter measures is not expected to result in any notable impacts to

the hydraulic conditions within the vicinity of the bridge or elsewhere within the river." The basis of this conclusion is from a hydraulic model of a hypothetical condition at the bridge with a constant streambed elevation of El. -12.0 from abutment to abutment. The results of the hydraulic model revealed that no notable changes to the hydraulic conditions occur within the vicinity of the bridge during normal tide, the highest astronomical tide, a 10-year storm surge, and a 100-year storm surge. It is important to note that the hypothetical condition is shallower than the proposed condition, which varies in depth from El. -13.0± to El. -16.0±, meaning that the hypothetical condition was a conservative model.

	Span A	**Span B**	**Span C**	**Span D**	**Span E**	**Span F**	**Span G**
Mean High Water (MHW)	2.27	2.27	2.27	2.27	2.27	2.27	2.27
Mean Low Water (MLW)	-2.23	-2.23	-2.23	-2.23	-2.23	-2.23	-2.23
Historic Mudline	-12.0±	-12.0±	-12.0±	-12.0±	-12.0±	-12.0±	-12.0±
Existing Mudline	-15.0±	-15.0±	-16.0±	-18.0±	-15.0±	-16.0±	-16.0±
Proposed Top of Riprap	-13.0±	-13.0±	-14.0±	-16.0±	-13.0±	-14.0±	-14.0±
Historic Mudline Depth at MHW (ft)	±14.27	±14.27	±14.27	±14.27	±14.27	±14.27	±14.27
Historic Mudline Depth at MLW (ft)	±9.77	±9.77	±9.77	±9.77	±9.77	±9.77	±9.77
Proposed MHW Depth (ft)	±15.27	±15.27	±16.27	±18.27	±15.27	±16.27	±16.27
Proposed MLW Depth (ft)	±10.77	±10.77	±11.77	±13.77	±10.77	±11.77	±11.77

Table 1: Vertical clearances.

As you can see from Table 1 above, the proposed water depths will range from just below eleven feet to just above eighteen feet during normal low and high tide conditions, respectively, which is one-foot deeper than the depth to the historic mudline. The water depths at the outer-most arches can be found in the columns for Span A and Span G.

The hydraulic model also compared flow velocities under the bridge during the four modeled events (normal tide, highest astronomical tide, 10-year storm surge and 100-year storm surge) for the existing and hypothetical conditions. The model determined that the highest velocities were consistently through Spans D, E and F. The results can be found in **Appendix B** and are summarized in Table 2 below.

	Span D		Span E		Span F	
Existing and Hypothetical Conditions	EX	HYP	EX	HYP	EX	HYP
Normal Tide	1.0	1.1	1.4	1.3	1.0	1.2
Highest Astronomical Tide	1.9	2.0	2.2	2.2	1.5	1.7
10-Year Storm Surge	3.0	3.0	3.9	3.5	2.0	2.7
100-Year Storm Surge	3.1	3.0	3.9	3.6	1.9	2.7

Table 2: Flow velocities in feet/second.

The comment from Atlantic Marine states that they are not opposed to the project but are concerned about maintaining a safe, navigable passage from their marina and under the bridge during construction. It is the intention of this project to have no or minimal impact to the recreational function of the waterbody during construction. To ensure this, a note has been added to the contract documents stating "The Contractor shall schedule and perform his/her operations in a manner to allow full water access to and from the marina at all times."

If you have any questions or require any additional information, please reach me at justin.mateus@crossmaneng.com or (401) 738-5660.

Yours very truly,
CROSSMAN ENGINEERING

Justin Mateus, P.E.
Project Director

Attachments: Appendix A – Copies of Public Comments Received
Appendix B – Existing and Hypothetic Flow Velocities by Pare Corporation

Cc: Rich Lucia, Amy Silva, Alisa Richardson, Odetta Morris, Steven Cabral, Sana Shaikh, Michael Greer, File

Justin Mateus

From: Amy Silva <asilva@crmc.ri.gov>
Sent: Wednesday, June 4, 2025 11:26 AM
To: Rich Lucia
Subject: FW: Public Notice 2025-02-078 / Barrington Bridge #123 (County Road)

Amy Silva
Supervising Environmental Scientist, CRMC
(401)-783-3370p /(401)-783-2069f
http://www.crmc.ri.gov

From: Jane Mainella <mainellaj@gmail.com>
Sent: Wednesday, June 4, 2025 10:57 AM
To: Cstaff <cstaff1@crmc.ri.gov>; Lisa Turner <lturner@crmc.ri.gov>; Asilshukla300@gmail.com; Amy Silva <asilva@crmc.ri.gov>; Jason Knight <jason@jasonknightri.com>; Akinfolarin, Hamid (DOT) <Hamid.Akinfolarin@dot.ri.gov>; Brian Hunt <bhunt@barrington.ri.gov>; Philip Hervey <PHervey@barrington.ri.gov>
Subject: Public Notice 2025-02-078 / Barrington Bridge #123 (County Road)

June 4, 2025

To Whom It May Concern:

We, Stephen and Jane Mainella of 81 County Rd, Barrington, RI 02806, received the Public Notice dated May 28, 2025 concerning " the proposed rehabilitation work for the Barrington Bridge #123 which includes the replacement of the deck expansion joint glands, minor concrete patching repairs of the substructure and concrete arch panels, restoring the contact area at select bearings, underwater repairs to the tremie seals of the bridge piers (Piers 1-4), and the installation of scour counter measures. Underwater repairs include void repairs, grout bags stacked by divers around the tremie to an elevation 18-inches above the top of the existing tremie. Riprap will also be placed by divers along the river bed between the piers, sloping up from existing midline to the elevation of the top of the grout bags."

We have lived at this property and owned and operated the marina, Atlantic Marine, for 46 years and have riparian rights to the center of the Barrington River.

We are not opposed to the proposed rehabilitation work that needs to be done on the Barrington Bridge #123.

Our concerns are to ensure that our boaters can safely navigate into and out of their boat slips at Atlantic Marine during the time of the proposed rehabilitation work, with any construction barges located well away from Atlantic Marine; and that our property and dock system are protected as well.

At a scheduled hearing, we would like a detailed presentation by RI DOT that explains this rehabilitation work to be done on the Barrington Bridge #123 showing how boaters can safely navigate that area of the Barrington River during the rehabilitation.

Thank you.
Stephen & Jane Mainella
Atlantic Marine
81 County Rd, Barrington, RI 02806

From: Amy Silva
To: Rich Lucia
Subject: FW: 2025-02-078
Date: Friday, June 6, 2025 8:04:46 AM

FYI-
Questions about the Barrington Bridge project....

Amy Silva
Supervising Environmental Scientist, CRMC
(401)-783-3370p /(401)-783-2069f
http://www.crmc.ri.gov

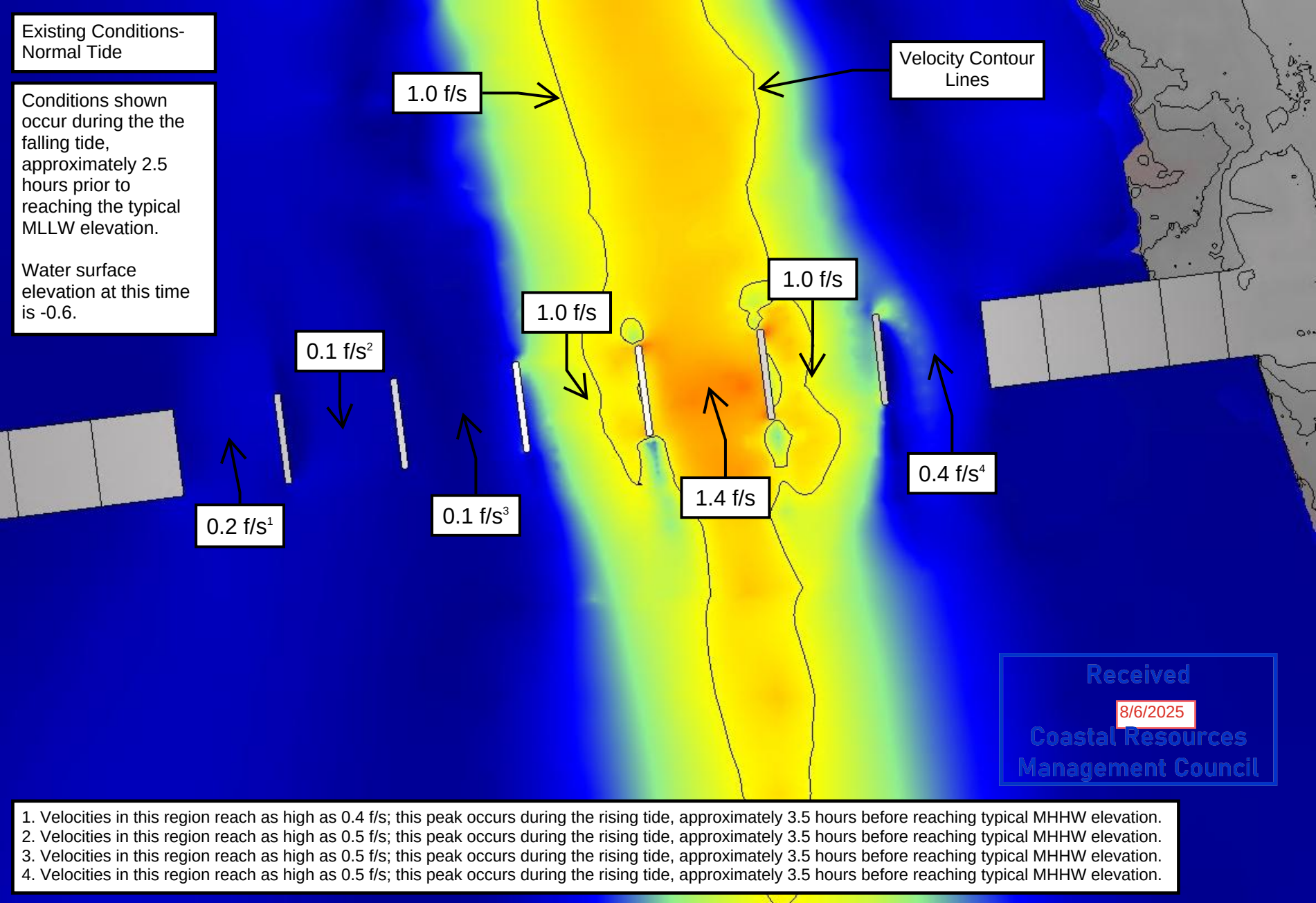
-----Original Message-----
From: Rock Singewald <rock9@mindspring.com>
Sent: Thursday, June 5, 2025 4:36 PM
To: Amy Silva <asilva@crmc.ri.gov>
Cc: Barber Jim <jimbarber7@yahoo.com>; betts antaya Don Martha <hecticbunny@hotmail.com>; Hunt William <williamjhuntjr@yahoo.com>; Lippman Craig <craig.lippman@gmail.com>; McVay Jay <jjmcvay@hotmail.com>; Silva Joe <Jsilva@townofwarren-ri.gov>; Singewald Rock <rock9@mindspring.com>
Subject: 2025-02-078

Amy, I'm on the Warren Harbor Management Commission, and at our meeting last night we discussed this permit application for repair work on the Barrington River Bridge. We had a question about the flow projections in Appendix C. It appears to us that the work described will make the openings under the bridge arches both narrower and shallower than present due to the addition off grout bags around the bridge pillar structures and the addition of 2 feet of rip rap on the river bottom under the arches and sloping upwards around the bridge pillars on the outside of the grout bags. It seems to us that a narrower and more shallow channel would necessarily increase the flow at peak tides as the volume of water seeks to find its level through a smaller space. The modeling described in Appendix C concludes there will be no change in flow while tide heights remain the same at MHT and MLT. The flow through this bridge now is significantly increased over the course of the tide cycle with water levels backing up against the pillars at peak tides. The increased flow is markedly greater during king tide cycles.

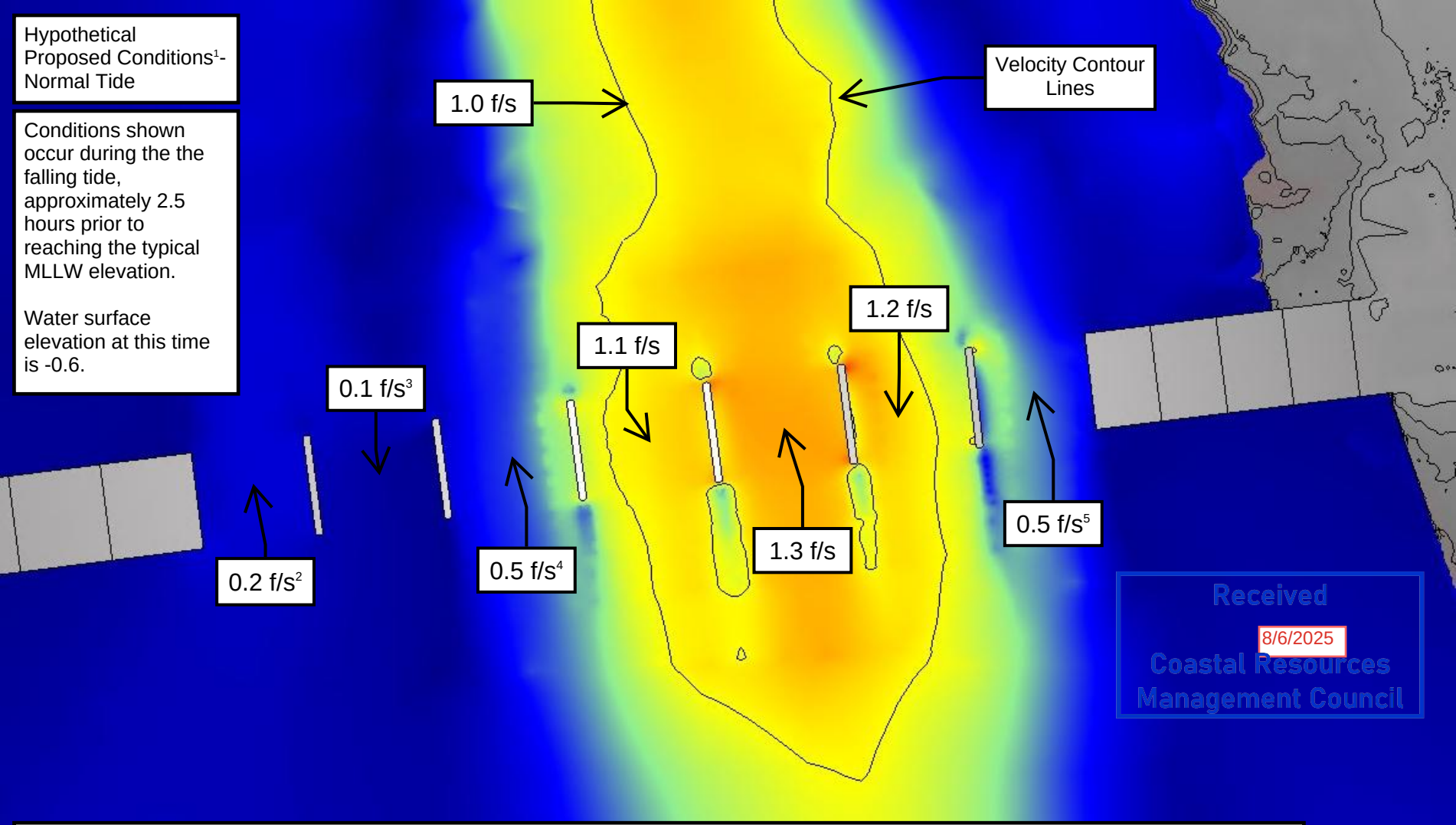
At peak tides the current through this bridge is already difficult for small boat traffic, kayaks, etc. We are concerned that this repair work will make the bridge even more dangerous during peak tides. Even if flow does not increase, which seems unlikely to us, the raising of the river bed with rip rap will make for a much more shallow passage at low tide especially in the arches near either end of the bridge. Does your technical staff agree with the conclusions in Appendix C that flow and tide heights will not increase?

We would appreciate any information you can share so we can decide whether to make a formal response.

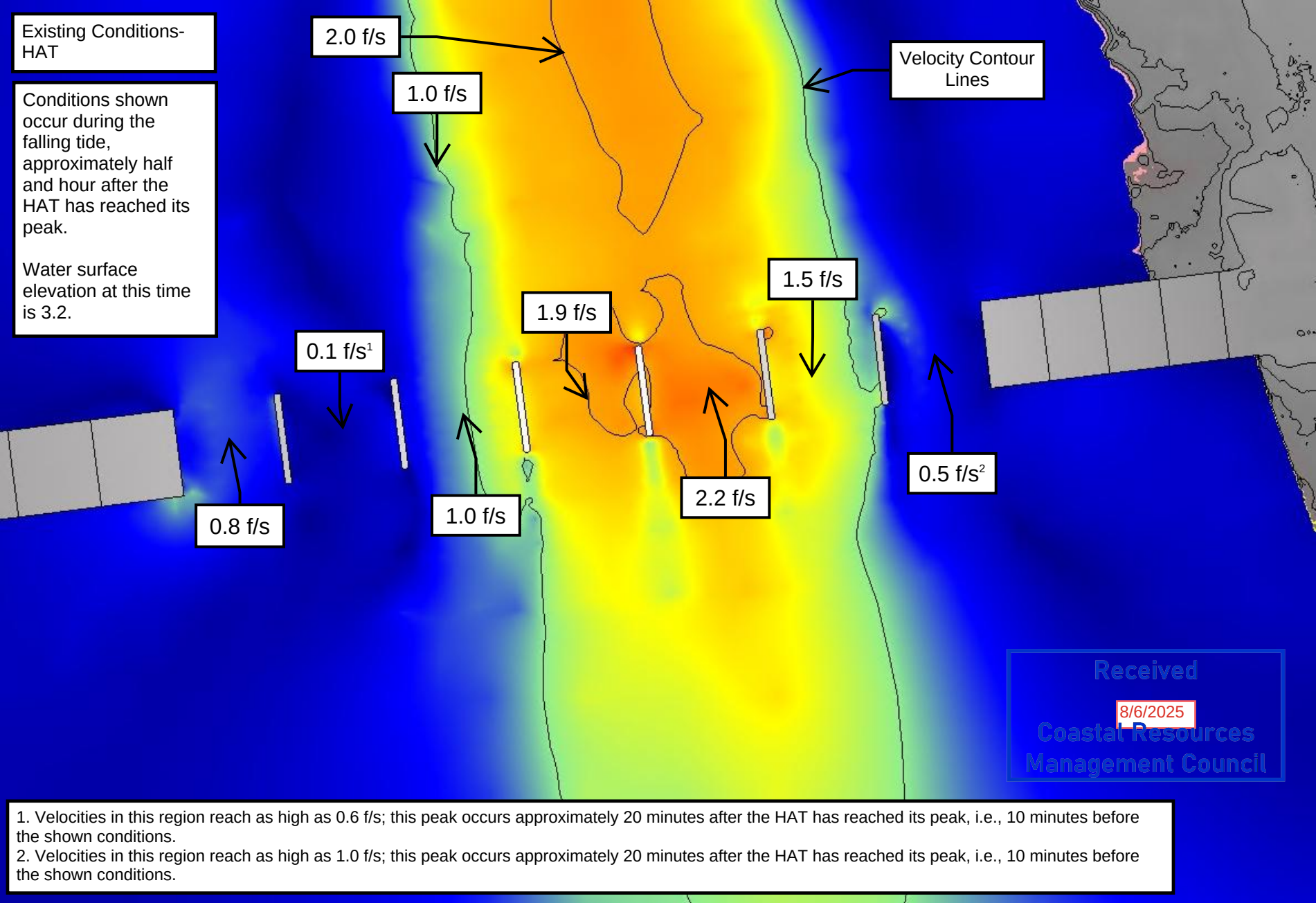
Thank you.



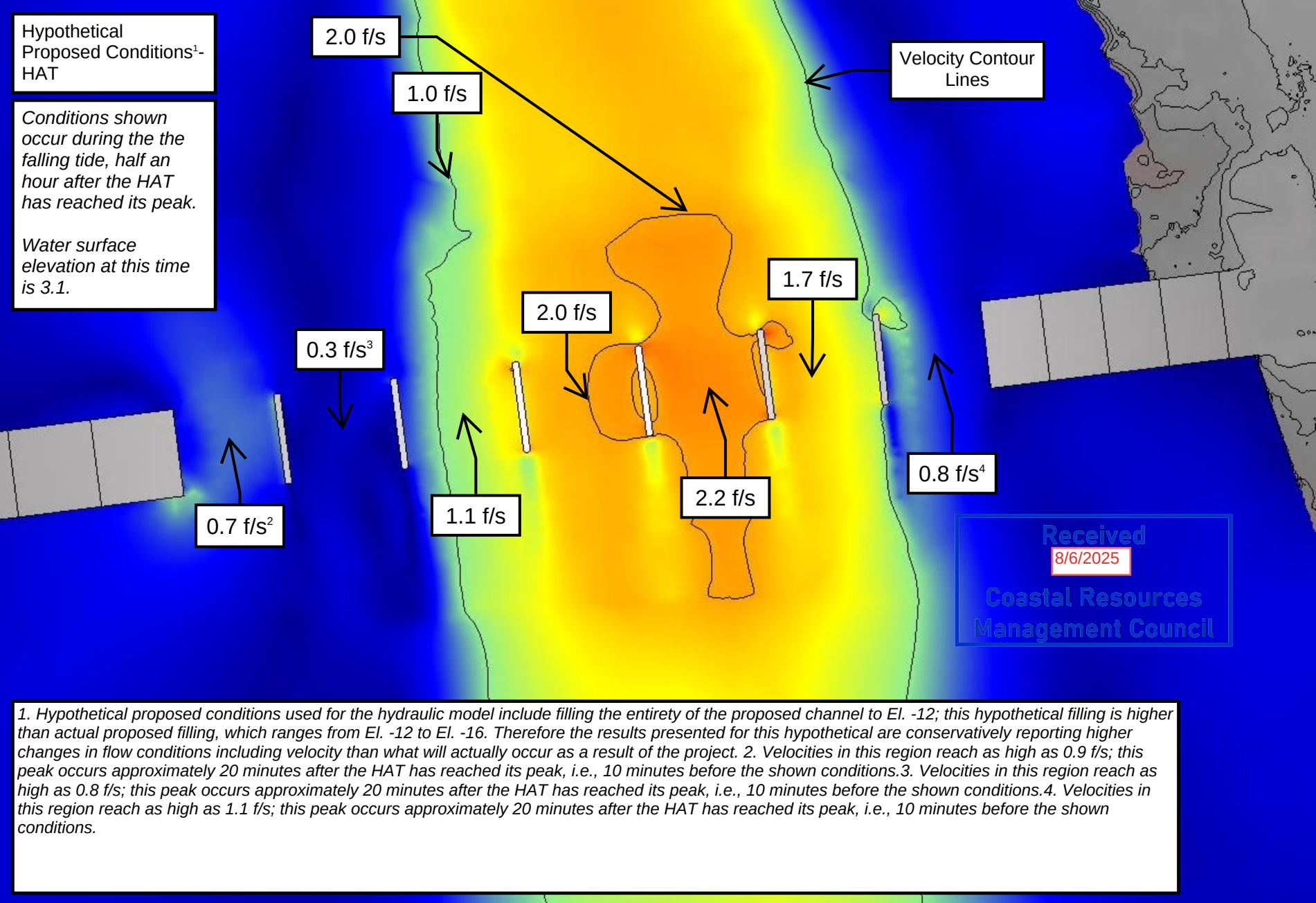
1. Velocities in this region reach as high as 0.4 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.
2. Velocities in this region reach as high as 0.5 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.
3. Velocities in this region reach as high as 0.5 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.
4. Velocities in this region reach as high as 0.5 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.



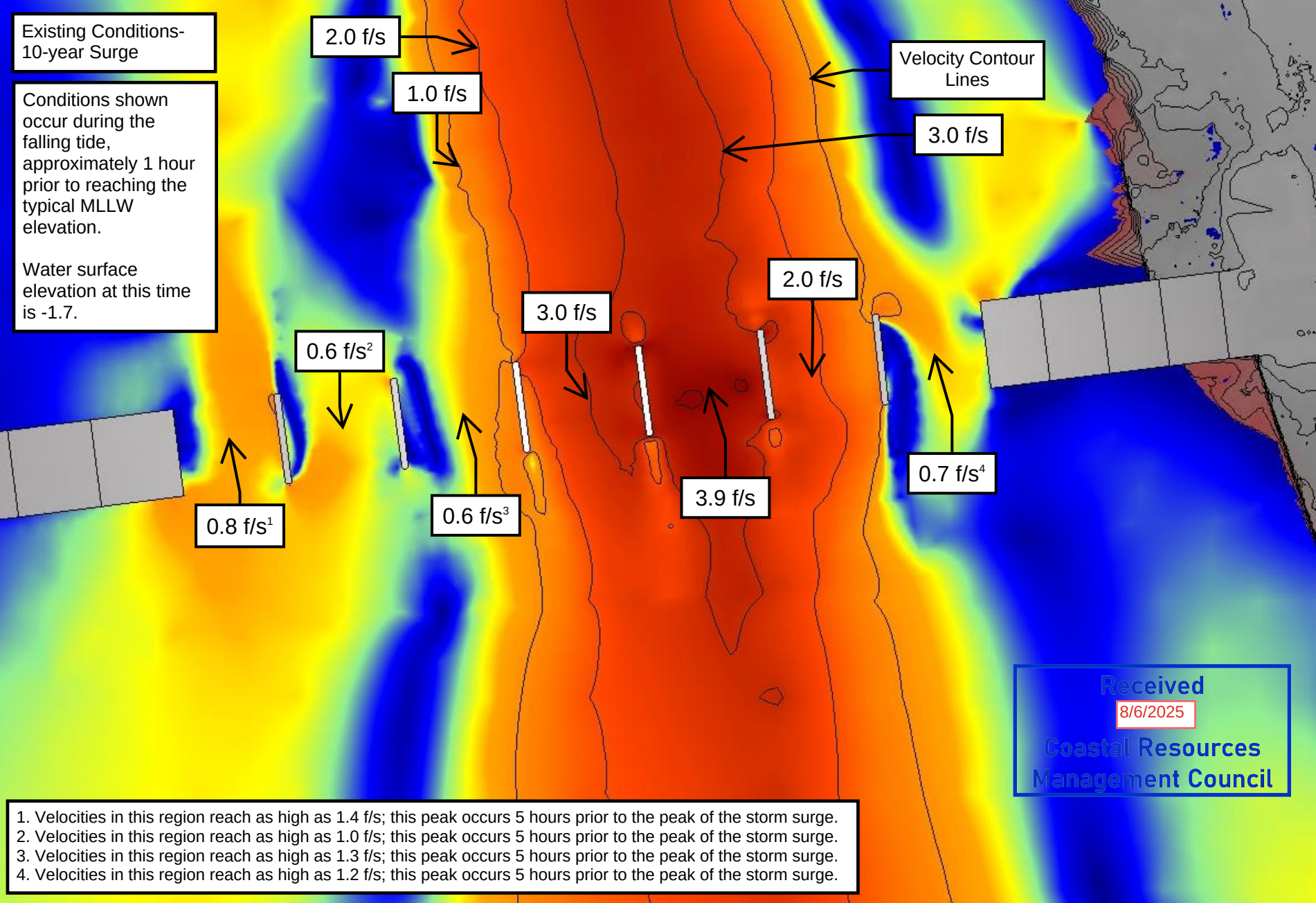
1. Hypothetical proposed conditions used for the hydraulic model include filling the entirety of the proposed channel to El. -12; this hypothetical filling is higher than actual proposed filling, which ranges from El. -12 to El. -16. Therefore the results presented for this hypothetical are conservatively reporting higher changes in flow conditions including velocity than what will actually occur as a result of the project.
2. Velocities in this region reach as high as 0.5 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.
3. Velocities in this region reach as high as 0.7 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.
4. Velocities in this region reach as high as 0.8 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.
5. Velocities in this region reach as high as 0.6 f/s; this peak occurs during the rising tide, approximately 3.5 hours before reaching typical MHHW elevation.



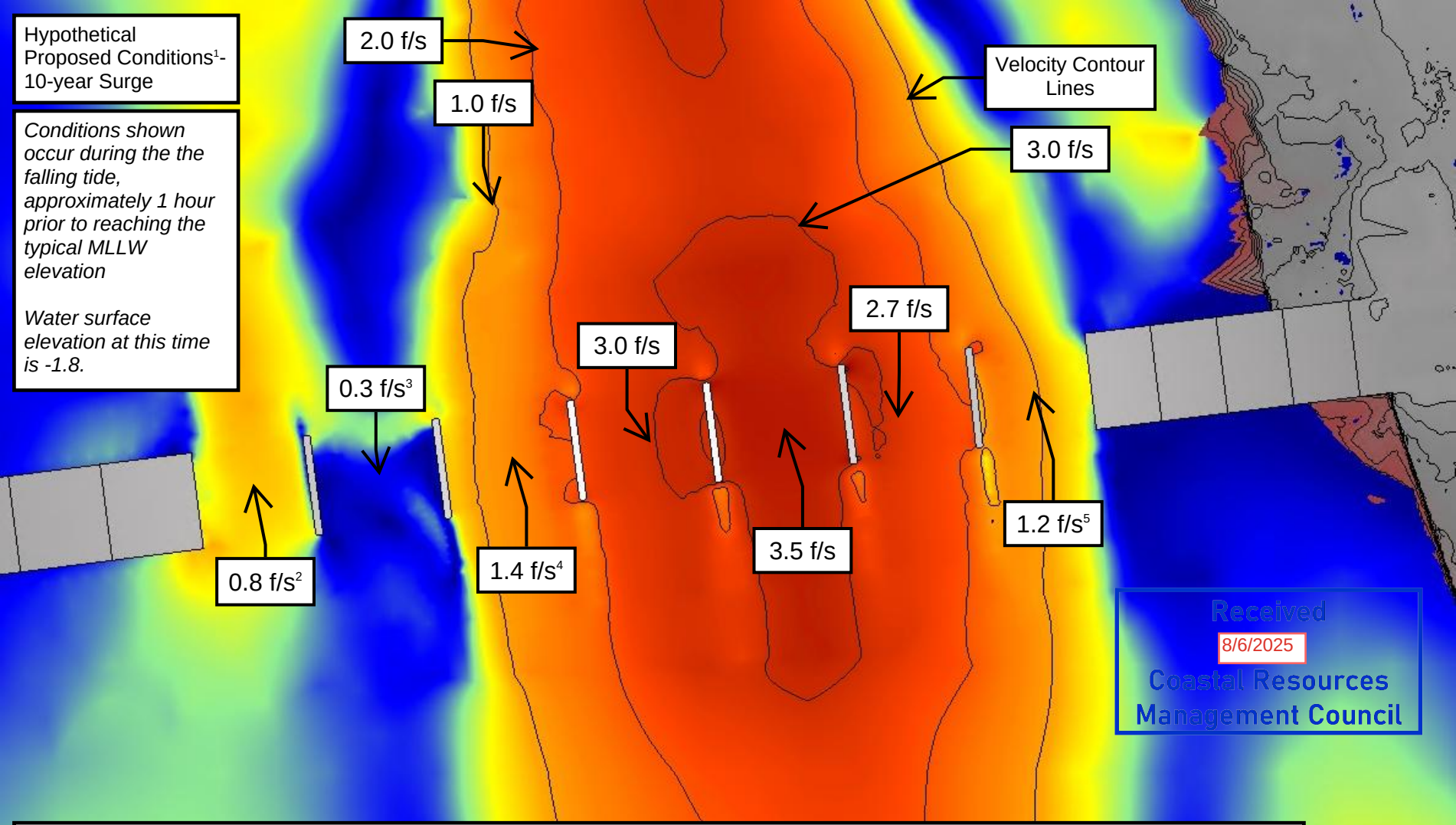
1. Velocities in this region reach as high as 0.6 f/s; this peak occurs approximately 20 minutes after the HAT has reached its peak, i.e., 10 minutes before the shown conditions.
2. Velocities in this region reach as high as 1.0 f/s; this peak occurs approximately 20 minutes after the HAT has reached its peak, i.e., 10 minutes before the shown conditions.



1. Hypothetical proposed conditions used for the hydraulic model include filling the entirety of the proposed channel to El. -12; this hypothetical filling is higher than actual proposed filling, which ranges from El. -12 to El. -16. Therefore the results presented for this hypothetical are conservatively reporting higher changes in flow conditions including velocity than what will actually occur as a result of the project. 2. Velocities in this region reach as high as 0.9 f/s; this peak occurs approximately 20 minutes after the HAT has reached its peak, i.e., 10 minutes before the shown conditions.3. Velocities in this region reach as high as 0.8 f/s; this peak occurs approximately 20 minutes after the HAT has reached its peak, i.e., 10 minutes before the shown conditions.4. Velocities in this region reach as high as 1.1 f/s; this peak occurs approximately 20 minutes after the HAT has reached its peak, i.e., 10 minutes before the shown conditions.



1. Velocities in this region reach as high as 1.4 f/s; this peak occurs 5 hours prior to the peak of the storm surge.
2. Velocities in this region reach as high as 1.0 f/s; this peak occurs 5 hours prior to the peak of the storm surge.
3. Velocities in this region reach as high as 1.3 f/s; this peak occurs 5 hours prior to the peak of the storm surge.
4. Velocities in this region reach as high as 1.2 f/s; this peak occurs 5 hours prior to the peak of the storm surge.



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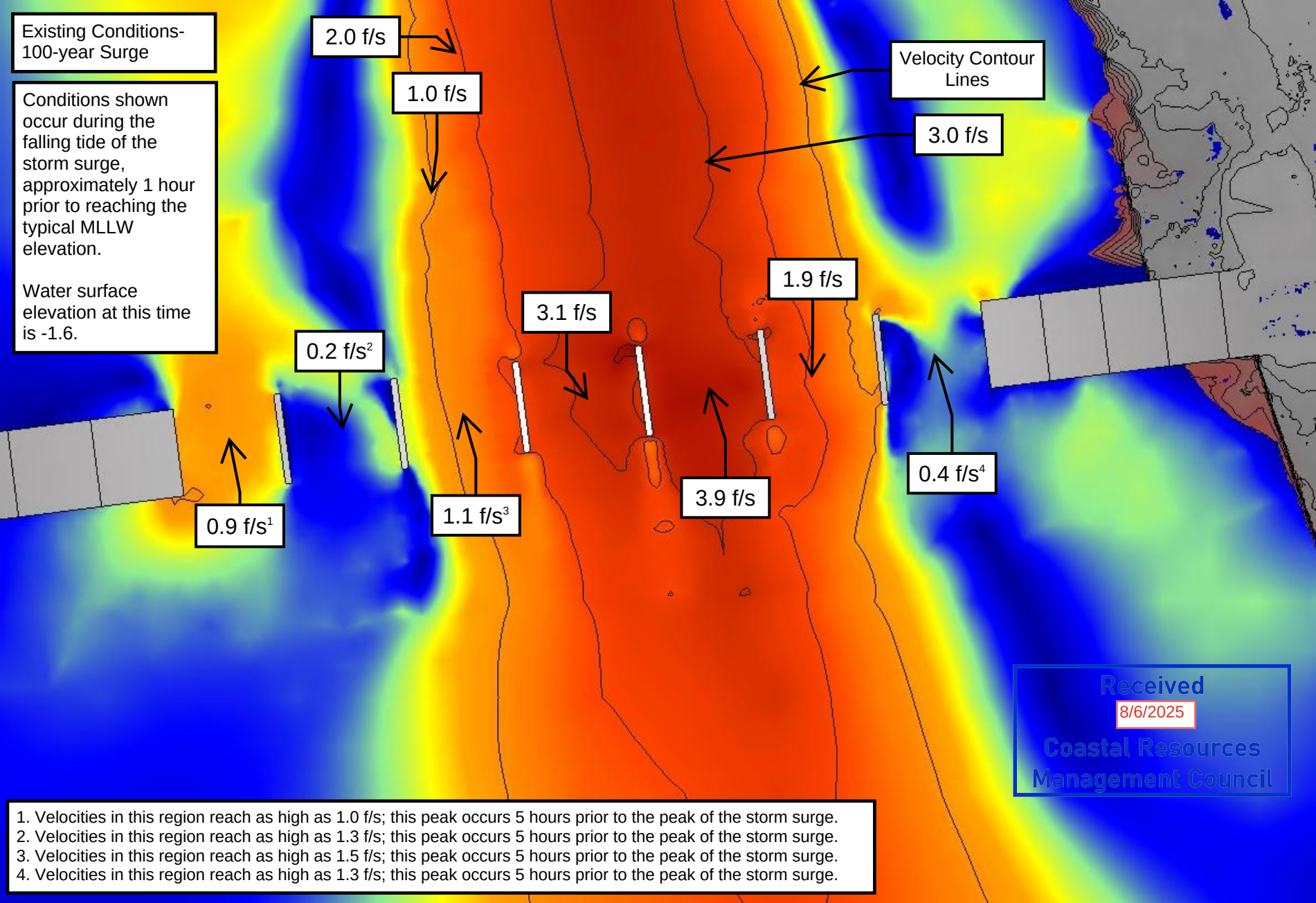
2. Velocities in this region reach as high as 1.3 f/s; this peak occurs 5 hours prior to the peak of the storm surge.
3. Velocities in this region reach as high as 1.8 f/s; this peak occurs 5 hours prior to the peak of the storm surge.
4. Velocities in this region reach as high as 2.1 f/s; this peak occurs 5 hours prior to the peak of the storm surge.
5. Velocities in this region reach as high as 1.5 f/s; this peak occurs 5 hours prior to the peak of the storm surge.



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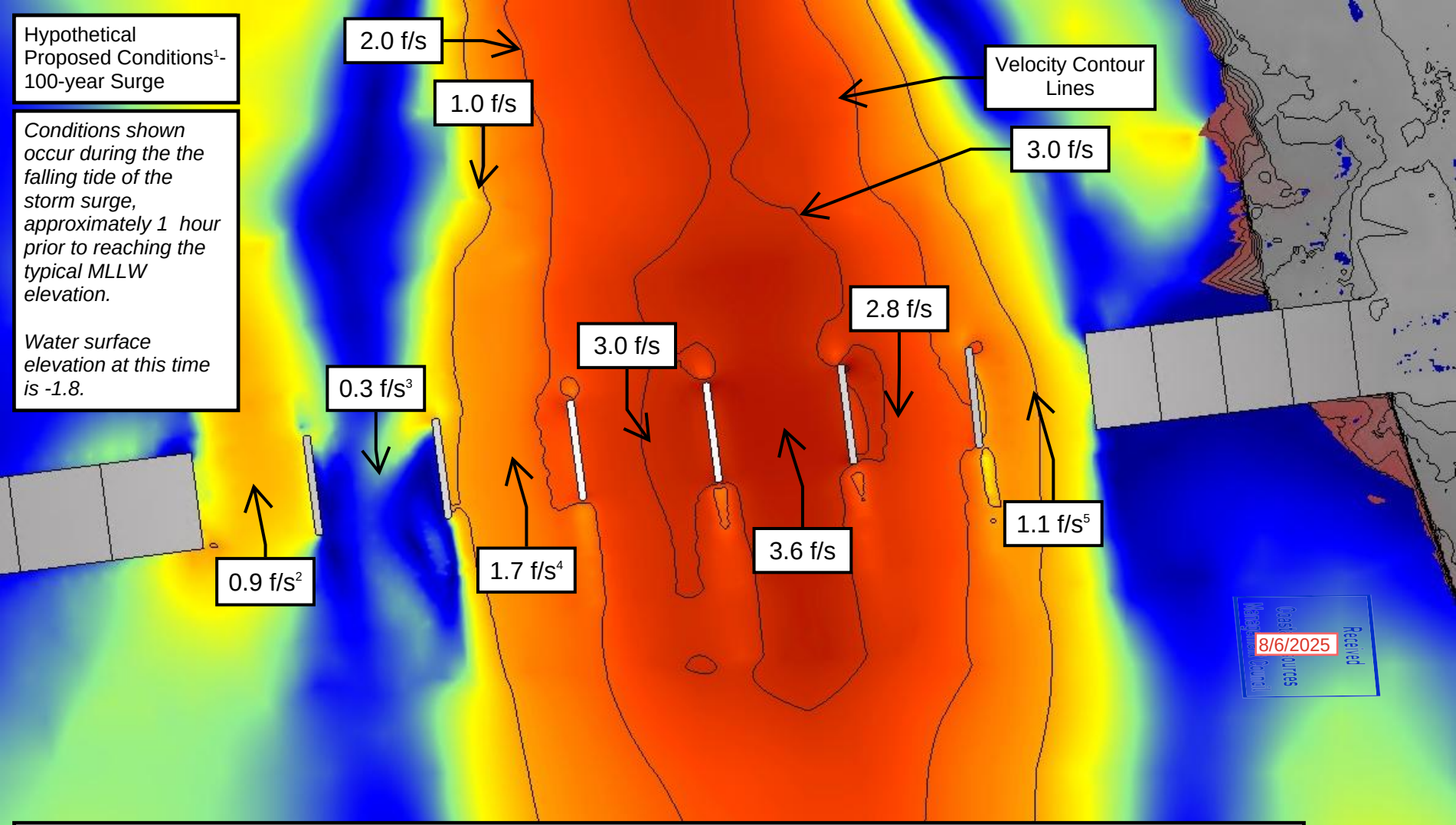

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Oliver Allamby

From: Rich Lucia
Sent: Friday, July 11, 2025 9:24 AM
To: Richardson, Alisa (DOT); Steven Cabral; Amy Silva; Cstaff
Subject: Barrington Bridge Repairs 2025-02-078
Attachments: FW_ 2025-02-078.pdf; FW: Public Notice 2025-02-078 / Barrington Bridge #123 (County Road)

Follow Up Flag: Follow up
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Categories: Oliver

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Oliver Allamby

From: Amy Silva
Sent: Friday, June 6, 2025 8:05 AM
To: Cstaff
Subject: FW: 2025-02-078

Follow Up Flag: Follow up
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Categories: Oliver

Amy Silva
Supervising Environmental Scientist, CRMC (401)-783-3370p /(401)-783-2069f http://www.crmc.ri.gov

-----Original Message-----
From: Rock Singewald <rock9@mindspring.com>
Sent: Thursday, June 5, 2025 4:36 PM
To: Amy Silva <asilva@crmc.ri.gov>
Cc: Barber Jim <jimbarber7@yahoo.com>; betts antaya Don Martha <hecticbunny@hotmail.com>; Hunt William <williamjhuntjr@yahoo.com>; Lippman Craig <craig.lippman@gmail.com>; McVay Jay <jjmcvay@hotmail.com>; Silva Joe <Jsilva@townofwarren-ri.gov>; Singewald Rock <rock9@mindspring.com>
Subject: 2025-02-078

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Oliver Allamby

From: Jane Mainella <mainellaj@gmail.com>
Sent: Wednesday, June 4, 2025 10:57 AM
To: Cstaff; Lisa Turner; Asilshukla300@gmail.com; Amy Silva; Jason Knight; Akinfolarin, Hamid (DOT); Brian Hunt; Philip Hervey
Subject: Public Notice 2025-02-078 / Barrington Bridge #123 (County Road)

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Oliver

June 4, 2025

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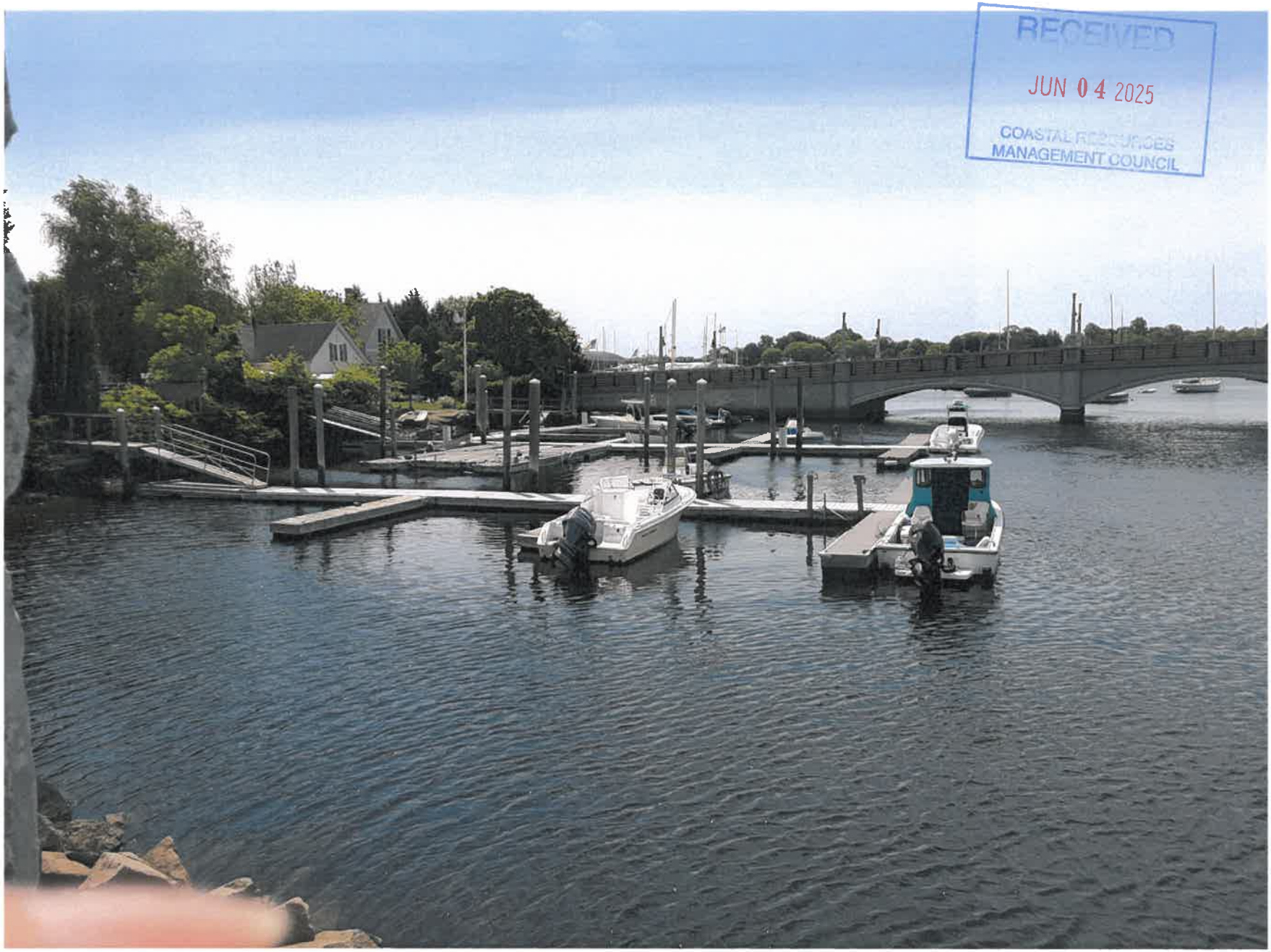
Thank you.
Stephen & Jane Mainella
Atlantic Marine
81 County Rd, Barrington, RI 02806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JUN 04 2025
COASTAL RESOURCES
MANAGEMENT COUNCIL