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CITY OF NEWPORT BEACH

CERTIFIED MAIL
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IN REPLY REFER TO:
Case No.: 12-09-13248

The Honorable Kevin Muldoon
Mayor, City of Newport Beach
100 Civic Center Drive
Newport Beach, California 92660

Community: City of Newport Beach, California
Community No.: 060227

APPEAL START

Dear Mayor Muldoon:

On August 15, 2016, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) provided your community with Preliminary copies of the revised Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for the City of Newport Beach, Orange County, California. FEMA has posted digital copies of these revised FIRM and FIS report materials to the following Website: <http://www.fema.gov/preliminaryfloodhazarddata>. The Preliminary FIRM and FIS report include proposed flood hazard information for certain locations in the City of Newport Beach. The proposed flood hazard information may include addition or modification of Special Flood Hazard Areas, the areas that would be inundated by the base (1-percent-annual-chance) flood; base flood elevations or depths; zone designations; or regulatory floodways.

We have published a notice of the proposed flood hazard determinations in the FEDERAL REGISTER and will publish a public notification concerning the appeal process (explained below) in *The Daily Pilot* and *OC Register* on or about June 2, 2017 and June 9, 2017. We will also publish a separate notice of the flood hazard determinations on the "Flood Hazard Determinations on the Web" portion of the FEMA Website (www.fema.gov/plan/prevent/fhm/bfe). We have enclosed copies of the notice published in the FEDERAL REGISTER and the newspaper notice for your information.

These proposed flood hazard determinations, if finalized, will become the basis for the floodplain management measures that your community must adopt or show evidence of having in effect to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). However, before any new or modified flood hazard information is effective for floodplain management purposes, FEMA will provide community officials and citizens an opportunity to appeal the proposed flood hazard information presented on the preliminary revised FIRM and FIS report posted to the above-referenced Website.

Section 110 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) is intended to ensure an equitable balancing of all interests involved in the setting of flood hazard determinations. The legislation provides for an explicit process of notification and appeals for your community and for private persons prior to this office making the flood hazard determinations final. The appeal procedure is outlined below for your information and in the enclosed document titled *Criteria for Appeals of Flood Insurance Rate Maps*.

During the 90-day appeal period following the second publication of the public notification in the above-named newspaper, any owner or lessee of real property in your community who believes his or her property rights will be adversely affected by the proposed flood hazard determinations may appeal to you, or to an agency that you publicly designate. It is important to note, however, that the sole basis for such appeals is the possession of knowledge or information indicating that the proposed flood hazard

determinations are scientifically or technically incorrect. The appeal data must be submitted to FEMA during the 90-day appeal period. Only appeals of the proposed flood hazard determinations supported by scientific or technical data can be considered before FEMA makes its final flood hazard determination at the end of the 90-day appeal period. Note that the 90-day appeal period is statutory and cannot be extended. However, FEMA also will consider comments and inquiries regarding data other than the proposed flood hazard determinations (e.g., incorrect street names, typographical errors, omissions) that are submitted during the appeal period, and will incorporate any appropriate changes to the revised FIRM and FIS report before they become effective.

If your community cannot submit scientific or technical data before the end of the 90-day appeal period, you may nevertheless submit data at any time. If warranted, FEMA will revise the FIRM and FIS report after the effective date. This means that the revised FIRM would be issued with the flood hazard information presently indicated, and flood insurance purchase requirements would be enforced accordingly, until such time as a revision could be made.

Any interested party who wishes to appeal should present the data that tend to negate or contradict our findings to you, or to an agency that you publicly delegate, in such form as you may specify. We ask that you review and consolidate any appeal data you may receive and issue a written opinion stating whether the evidence provided is sufficient to justify an official appeal by your community in its own name or on behalf of the interested parties. Whether or not your community decides to appeal, you must send copies of individual appeals and supporting data, if any, to:

Ed Curtis, Engineer
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, California 94607

If we do not receive an appeal or other formal comment from your community in its own name within 90 days of the second date of public notification, we will consolidate and review on their own merits such appeal data and comments from individuals that you may forward to us, and we will make such modifications to the proposed flood hazard information presented on the revised FIRM and in the revised FIS report as may be appropriate. If your community decides to appeal in its own name, all individuals' appeal data must be consolidated into one appeal by you, because, in this event, we are required to deal only with the local government as representative of all local interests. We will send our final decision in writing to you, and we will send copies to the community floodplain administrator, each individual appellant, and the State NFIP Coordinator.

All appeal submittals will be resolved by consultation with officials of the local government involved, by an administrative hearing, or by submission of the conflicting data to an independent scientific body or appropriate Federal agency for advice. Use of a Scientific Resolution Panel (SRP) is also available to your community in support of the appeal resolution process when conflicting scientific or technical data are submitted during the appeal period. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. An SRP is an option after FEMA and community officials have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Please refer to the enclosed "Scientific Resolution Panels" fact sheet for additional information on this resource available to your community.

FEMA will make the reports and other information used in making the final determination available for public inspection. Until the conflict of data is resolved and the revised FIRM becomes effective, flood insurance available within your community will continue to be available under the effective NFIP map, and no person shall be denied the right to purchase the applicable level of insurance at chargeable rates.

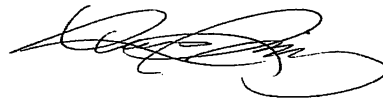
The decision by your community to appeal, or a copy of its decision not to appeal, should be filed with this office no later than 90 days following the second publication of the flood hazard determination notice in the above-named newspaper. Your community may find it appropriate to call further attention to the proposed flood hazard determinations and to the appeal procedure by using a press release or other public notice.

If warranted by substantive changes, during the appeal period we will send you Revised Preliminary copies of the revised FIRM and FIS report. At the end of the 90-day appeal period and following the resolution of any appeals and comments, we will send you a Letter of Final Determination, which will finalize the flood hazard information presented on the revised FIRM and FIS report and will establish an effective date.

If you have any questions regarding participation in the NFIP, we encourage you to contact the FEMA Region IX Natural Hazards Program Specialist, Mark Delorey, in Oakland, California, either by telephone at (510) 627-7057 or in writing to FEMA Region IX, 1111 Broadway, Suite 1200, Oakland, California 94607.

If you have any questions regarding the proposed flood hazard determinations, revised FIRM panels, or revised FIS report for your community, please call our FEMA Information eXchange (FMIX), toll free, at 1-877-FEMA MAP (1-877-336-2627) or e-mail the FMIX staff at FEMAMapSpecialist@riskmapcds.com.

Sincerely,



Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

List of Enclosures:

- Newspaper Notice
- Proposed Flood Hazard Determinations FEDERAL REGISTER Notice
- Criteria for Appeals of Flood Insurance Rate Maps
- "Appeals and Comments on Preliminary Maps and Reports for the California Open Pacific Coast Study: The Process" Fact Sheet
- "Appeals and Comments on Preliminary Maps and Reports for the California Open Pacific Coast Study: Supporting Data and Documentation" Fact Sheet
- "Scientific Resolution Panels" Fact Sheet

cc: Community Map Repository
Seimone Jurjis, Assistant Community Development Director, Chief Building Official, Floodplain Administrator (w/o enclosures)

bcc: Jeffrey Lusk, Mitigation Division Director RIX-MT
James Eto, State NFIP Coordinator, California Department of Water Resources (w/o enclosures)
FEDD File
Case File

DEPARTMENT OF HOMELAND SECURITY

FEDERAL EMERGENCY MANAGEMENT AGENCY

Proposed Flood Hazard Determinations for Orange County, California and Incorporated Areas

The Department of Homeland Security's Federal Emergency Management Agency has issued a preliminary Flood Insurance Rate Map (FIRM), and where applicable, Flood Insurance Study (FIS) report, reflecting proposed flood hazard determinations within Orange County, California and Incorporated Areas. These flood hazard determinations may include the addition or modification of Base Flood Elevations, base flood depths, Special Flood Hazard Area boundaries or zone designations, or the regulatory floodway. Technical information or comments are solicited on the proposed flood hazard determinations shown on the preliminary FIRM and/or FIS report for Orange County, California and Incorporated Areas. These flood hazard determinations are the basis for the floodplain management measures that your community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program. However, before these determinations are effective for floodplain management purposes, you will be provided an opportunity to appeal the proposed information. For information on the statutory 90-day period provided for appeals, as well as a complete listing of the communities affected and the locations where copies of the FIRM are available for review, please visit FEMA's website at www.fema.gov/plan/prevent/fhm/bfe, or call the FEMA Map Information eXchange (FMIX) toll free at 1-877-FEMA MAP (1-877-336-2627).

State and county	Location and case No.	Chief executive officer of community	Community map repository	Online location of letter of map revision	Effective date of modification	Community No.
Henrico	Unincorporated areas of Henrico County (16-03-1954P).	The Honorable Tyrone E. Nelson, Chairman, Henrico County Board of Supervisors, P.O. Box 90775, Henrico, VA 23273.	Henrico County Department of Public Works, 4301 East Parham Road, Henrico, VA 23228.	http://www.msc.fema.gov/lomc	Apr. 26, 2017	510077
Washington, DC	District of Columbia (16-03-2348P).	The Honorable Muriel Bowser, Mayor, District of Columbia, 1350 Pennsylvania Avenue Northwest, Washington, DC 20004.	Department of Energy and Environment, 1200 1st Street, Northeast, 5th Floor, Washington, DC 20002.	http://www.msc.fema.gov/lomc	Apr. 17, 2017	110001

[FR Doc. 2017-04883 Filed 3-10-17; 8:45 am]

BILLING CODE 9110-12-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA-2017-0002; Internal Agency Docket No. FEMA-B-1673]

Proposed Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: Comments are requested on proposed flood hazard determinations, which may include additions or modifications of any Base Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the preliminary FIRM, and where applicable, the FIS report that the Federal Emergency Management Agency (FEMA) has provided to the affected communities. The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). In addition, the FIRM and FIS report, once effective, will be used by insurance agents and others to calculate appropriate flood insurance premium rates for new buildings and the contents of those buildings.

DATES: Comments are to be submitted on or before June 12, 2017.

ADDRESSES: The Preliminary FIRM, and where applicable, the FIS report for each community are available for

inspection at both the online location and the respective Community Map Repository address listed in the tables below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

You may submit comments, identified by Docket No. FEMA-B-1673, to Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW., Washington, DC 20472, (202) 646-7659, or (email) patrick.sacbibit@fema.dhs.gov.

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW., Washington, DC 20472, (202) 646-7659, or (email) patrick.sacbibit@fema.dhs.gov; or visit the FEMA Map Information eXchange (FMIX) online at www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP and also are used to calculate the appropriate flood insurance premium rates for new buildings built after the FIRM and FIS report become effective.

The communities affected by the flood hazard determinations are

provided in the tables below. Any request for reconsideration of the revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at http://floodsrp.org/pdfs/srp_fact_sheet.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, "Flood Insurance.")

Dated: February 16, 2017.

Roy E. Wright,
Deputy Associate Administrator for Insurance and Mitigation, Department of Homeland Security, Federal Emergency Management Agency.

I. Non-watershed-based studies:

Community	Community map repository address
Orange County, California and Incorporated Areas	
Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata	
Project: 12-09-1324S Preliminary Date: August 15, 2016	
City of Costa Mesa City of Dana Point City of Fountain Valley City of Huntington Beach City of Irvine City of Laguna Beach City of Laguna Niguel City of Newport Beach City of San Clemente City of San Juan Capistrano City of Seal Beach City of Westminster Unincorporated Areas of Orange County	City Hall, 77 Fair Drive, Costa Mesa, CA 92626. City Hall, 33282 Golden Lantern Street, Dana Point, CA 92629. City Hall, 10200 Slater Avenue, Fountain Valley, CA 92708. City Hall, 2000 Main Street, Huntington Beach, CA 92648. City Hall, 1 Civic Center Plaza, Irvine, CA 92606. City Hall, 505 Forest Avenue, Laguna Beach, CA 92651. City Hall, 30111 Crown Valley Parkway, Laguna Niguel, CA 92677. City Hall, 100 Civic Center Drive, Newport Beach, CA 92660. City Hall, 100 Avenida Presidio, San Clemente, CA 92672. City Hall, 32400 Paseo Adelanto, San Juan Capistrano, CA 92675. City Hall, 211 8th Street, Seal Beach, CA 90740. City Hall, 8200 Westminster Boulevard, Westminster, CA 92683. Orange County Flood Control Division, 300 North Flower Street, Santa Ana, CA 92703.
Ventura County, California and Incorporated Areas	
Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata	
Project: 12-09-1164S Preliminary Date: September 30, 2016	
City of Oxnard City of Port Hueneme City of San Buenaventura Unincorporated Areas of Ventura County	Planning Department, 214 South C Street, Oxnard, CA 93030. Public Works Department, 250 North Ventura Road, Port Hueneme, CA 93041. San Buenaventura City Hall, 501 Poli Street, Ventura, CA 93001. Ventura County Hall of Administration, 800 South Victoria Avenue, Ventura, CA 93009.
Valley County, Idaho and Incorporated Areas	
Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata	
Project: 11-10-0105S Preliminary Date: August 26, 2016	
City of Cascade City of McCall Unincorporated Areas of Valley County	City Hall, 105 South Main Street, Cascade, ID 83611. City Hall, 216 East Park Street, McCall, ID 83638. Valley County Courthouse, 219 North Main Street, Cascade, ID 83611.
Nye County, Nevada and Incorporated Areas	
Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata	
Project: 16-09-0634S Preliminary Date: April 15, 2016	
Unincorporated Areas of Nye County	Nye County Planning Department, 250 North Highway 160, Suite 1, Pahrump, NV 89060.
Curry County, Oregon and Incorporated Areas	
Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata	
Project: 12-10-0407S Preliminary Date: August 12, 2016	
City of Brookings City of Gold Beach City of Port Orford Unincorporated Areas of Curry County	Planning Department, City Hall, 898 Elk Drive, Brookings, OR 97415. City Hall, 29592 Ellensburg Avenue, Gold Beach, OR 97444. Planning Commission, City Hall, 555 West 20th Street, Port Orford, OR 97465. Curry County Courthouse, 94235 Moore Street, Gold Beach, OR 97444.

Criteria for Appeals of Flood Insurance Rate Maps

November 30, 2011



FEMA

This document outlines the criteria for appealing proposed changes in flood hazard information on Flood Insurance Rate Maps (FIRMs) during the appeal period. The Department of Homeland Security's Federal Emergency Management Agency (FEMA) applies rigorous standards in developing and updating flood hazard information and provides communities with an opportunity to review the updated flood hazard information presented on new or revised FIRMs before they become final.

1. Background

The regulatory requirements related to appeals are found in Part 67 of the National Flood Insurance Program (NFIP) regulations. Additional FEMA procedural details are provided in Procedure Memorandum No. 57, *Expanded Appeals Process*, dated November 30, 2011. Detailed information on appeals can also be found in *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps—A Guide for Community Officials* and FEMA's *Document Control Procedures Manual*. All referenced documents are accessible through the "Guidance Documents and Other Published Resources" webpage, located at: http://www.fema.gov/plan/prevent/fhm/firm_docs.shtm.

As outlined in these documents, an appeal period is provided for all new or modified flood hazard information shown on a FIRM, including additions or modifications of any Base (1-percent-annual-chance) Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway. SFHAs are areas subject to inundation by the base (1-percent-annual-chance) flood and include the following SFHA zone designations: A, AO, AH, A1-A30, AE, A99, AR, AR/A1-A30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-V30, VE, and V. Therefore, a statutory 90-day appeal period is required when a flood study, Physical Map Revision (PMR), or Letter of Map Revision (LOMR) is proposed in which:

- New BFEs or base flood depths are proposed or currently effective BFEs or base flood depths are modified;
- New SFHAs are proposed or the boundaries of currently effective SFHAs are modified;
- New SFHA zone designations are proposed or currently effective SFHA zone designations are modified; and
- New regulatory floodways are proposed or the boundaries of currently effective floodways are modified.

Clarification on the necessity for an appeal period is provided for certain specific circumstances outlined below:

- Edge matching of effective floodplain boundaries or information. This usually occurs in first-time countywide flood mapping projects when effective BFEs, base flood depths,

SFHAs, or floodways are extended to an adjacent community that previously had differing or no BFEs, base flood depths, SFHAs, or floodways shown on their effective FIRM in order to fix a map panel to map panel mismatch. In these instances, **an appeal period is required** because BFEs, base flood depths, SFHAs, or floodways are changing or being shown for the first time in the area.

- Redelineation of effective floodplain boundaries. This occurs when an effective SFHA boundary is redrawn on the FIRM using new or updated topography to more accurately represent the risk of flooding. In these instances **an appeal period is required** because the SFHA boundary is changing. However, the appeal period will only apply to the updated SFHA boundary delineations, not the methodology used to originally establish BFEs/flood depths (since this will not have changed).
- Revisions to SFHA zone designations. A revision to an SFHA zone designation may occur with or without a BFE and/or boundary change. For example, when a Zone VE floodplain is changed to a Zone AE designation to reflect the updated location of a Primary Frontal Dune (PFD), the BFE and SFHA boundary may not necessarily change. For any change in SFHA zone designation, including the *removal* of an SFHA designation from a FIRM, **an appeal period is required.**
- Regulatory floodway boundaries. When the effective floodway boundary is redrawn on the FIRM to more accurately represent the extent of the encroachment, **an appeal period is required.**
- MT-1 cases. When the SFHA or floodway boundary is amended due to the issuance of a Letter of Map Amendment (LOMA), Letter of Map Revision based on Fill (LOMR-F), Letter of Map Revision – Floodway, or other MT-1 case, **an appeal period is not required.**
- Annexation of effective floodplain boundaries. When a new or revised FIRM shows new community boundaries which include effective BFEs, base flood depths, SFHAs, or floodways, **an appeal period is not required**, provided no BFE, base flood depth, SFHA, or floodway changes apply.

However, in cases where the flood hazard information in the annexed area has never received due process (for example, if the area is shown for information only on all FIRMs depicting the area), **an appeal period is required.**

- Reissuance of effective LOMRs: When a LOMR is reissued after not being incorporated into a revised FIRM, **an appeal period is not required.**

- Updates that do not impact flood hazard data: When flood studies, PMRs, or LOMRs result in changes to FIRMs that do not impact BFEs, base flood depths, SFHAs, or floodways, **an appeal period is not required**.
- Datum Conversions: **An appeal period is not required** specifically for a datum conversion (e.g., a conversion from NGVD 29 to NAVD 88).

1.1. Additional Procedures for LOMRs

Beginning with LOMRs issued on or after December 1, 2011, the following procedures will apply:

In order to provide sufficient due process rights for changes due to LOMRs, any LOMR in a compliant community that requires an appeal period will become effective 120 days from the second newspaper publication date, following FEMA's current policy. This allows time to collect appeals, as well as provides for newspaper publication schedule conflicts. LOMRs in non-compliant communities or in communities that require adoption of the LOMR will become effective following the six month compliance period.

Evidence of public notice or property owner notification of the changes due to a LOMR will continue to be requested during the review of the LOMR request. This will help to ensure that the affected population is aware of the flood hazard changes in the area and the resultant LOMR. However, evidence of property owner acceptance of the changes due to a LOMR will no longer be requested. Because all LOMRs that require an appeal period will become effective 120 days from the second newspaper publication date, the receipt of such acceptance will have no effect on the effective date of the LOMR; therefore, there is no need for the requester to pursue acceptance.

2. Appeal Eligibility Requirements

Areas that are eligible for appeal include:

- Areas showing new or revised BFEs or base flood depths
- Areas showing new or revised SFHA boundaries (including both increases and decreases in the extent of the SFHA)
- Areas where there is a change in SFHA zone designation
- Areas showing new or revised regulatory floodway boundaries (including both increases and decreases in the extent of the regulatory floodway).

The area of concern must be within the scope of the new or modified BFEs, base flood depths, SFHA boundaries, SFHA zone designations, and/or regulatory floodway boundary changes and

be supported by scientific and/or technical data. The criteria for data submittals are outlined in Title 44, Chapter 1, Code of Federal Regulations, Section 67.6(b) and in this document.

The statutory 90-day appeal period cannot be extended. FEMA may provide an additional 30 days for a community after the 90-day appeal period has ended to submit supporting and clarifying data for an appeal received during the appeal period. No appeals will be accepted after the 90-day appeal period.

Challenges that do not relate to new or modified BFEs, base flood depths, SFHA boundaries, SFHA zone designations, or floodways are not considered appeals. Challenges received by FEMA during the appeal period that do not address these items will be considered comments. Comments include, but are not limited to the following:

- The impacts of changes that have occurred in the floodplain that should have previously been submitted to FEMA in accordance with 44 Code of Federal Regulations, Section 65.3;
- Corporate limit revisions;
- Road name errors and revisions;
- Requests that changes effected by a LOMA, LOMR-F, or LOMR be incorporated;
- Base map errors; and
- Other possible omissions or potential improvements to the mapping.

Any significant problems identified by community officials or residents (at formal meetings or otherwise) will be addressed appropriately.

3. Supporting Data and Documentation Required for Appeals

The BFEs and base flood depths presented in Flood Insurance Study (FIS) reports and shown on FIRMs are typically the result of coastal, hydrologic and hydraulic engineering methodologies. Floodway configurations, generally developed as part of the hydraulic analyses, are adopted by communities as a regulatory tool for floodplain management and are delineated on FIRMs along with SFHAs.

Because numerous methodologies have been developed for estimating flood discharges and flood elevations/depths, and other flood hazard information under a variety of conditions, FEMA contractors, mapping partners, and others whose data and documentation FEMA approves and uses, such as communities, regional entities and State agencies participating in the Cooperating Technical Partners (CTP) Program, use their professional judgment in selecting methodologies that are appropriate for the conditions along a particular segment of a particular flooding source.

For FEMA contracted flood studies and PMRs the approach to be used will usually be discussed with community officials at the beginning of the flood study or PMR mapping process.

Because the methodologies are the result of attempts to reduce complex physical processes to mathematical models, the methodologies include simplifying assumptions. Usually, the methodologies are used with data developed specifically for the flood study, PMR, or LOMR. Therefore, the results of the methodologies are affected by the amount of data collected and the precision of any measurements made.

Because of the judgments and assumptions that must be made and the limits imposed by cost considerations, the correctness of the BFEs, base flood depths and other flood hazard information is often a matter of degree, rather than absolute. For that reason, appellants who contend that the BFEs, base flood depths, or other flood hazard information is incorrect because better methodologies could have been used, better assumptions could have been made, or better data could have been used, must provide alternative analyses that incorporate such methodologies, assumptions, or data and that quantify their effect on the BFEs, base flood depths or other flood hazard information. FEMA will review the alternative analyses and determine whether they are superior to those used for the flood study, PMR, or LOMR and whether changes to the FIS report and/or FIRM, or LOMR are warranted as a result.

Unless appeals are based on indisputable mathematical or measurement errors or the effects of natural physical changes that have occurred in the floodplain, they must be accompanied by all data that FEMA needs to revise the preliminary version of the FIS report and FIRMs. Therefore, appellants should be prepared to perform coastal, hydrologic and hydraulic analyses, to plot new and/or revised Flood Profiles, and to delineate revised SFHA zone and regulatory floodway boundaries as necessary.

An appeal must be based on data that show the new or modified BFEs, base flood depths, SFHA boundaries, SFHA zone designations, or floodways to be scientifically or technically incorrect. All analyses and data submitted by appellants must be certified by a Registered Professional Engineer or Licensed Land Surveyor, as appropriate. The data and documentation that must be submitted in support of the various types of appeals are discussed in the subsections that follow.

3.1. Appealing BFEs, Base Flood Depths, SFHA Zone Designations, or Regulatory Floodways

Scientifically incorrect BFEs, base flood depths, SFHA zone designations, or regulatory floodways:

Proposed BFEs, base flood depths, SFHA zone designations, or regulatory floodways are said to be scientifically incorrect if the methodology used in the determination of the BFEs,

base flood depths, SFHA zone designations, or regulatory floodways is inappropriate or incorrect, or if the assumptions made as part of the methodology are inappropriate or incorrect. An appeal that is based on the proposed BFEs, base flood depths, SFHA zone designations, or regulatory floodways being scientifically incorrect would, therefore, contend that the use of a different methodology or different assumptions would produce more accurate results. A list of National Flood Insurance Program-accepted hydrologic, hydraulic and coastal models is available on FEMA's website at http://www.fema.gov/plan/prevent/fhm/en_modl.shtm. To show that an inappropriate or incorrect coastal, hydraulic or hydrologic methodology has been used, an appellant must submit the following data, as applicable:

- New hydrologic analysis based on alternative methodology and if applicable, updated hydraulic/floodway or coastal analyses based on the updated discharge values;
- New hydraulic/floodway analysis based on alternative methodology and original flood discharge values (if the appeal does not involve the hydrologic analysis);
- New coastal analyses based on alternative methodology and original stillwater elevations (if the appeal does not involve the hydrologic analysis);
- Explanation for superiority of alternative methodology;
- As applicable, revised Summary of Discharges Table, Flood Profiles, Transect Data Table, Summary of Stillwater Elevations Table, and Floodway Data Table (FDT); and
- Revised SFHA zone boundaries and, if applicable, regulatory floodway boundary delineations.

Technically Incorrect BFEs, Base Flood Depths, SFHA Zone Designations, or Regulatory Floodways:

The proposed BFEs, base flood depths, SFHA zone designation or regulatory floodways are said to be technically incorrect if at least one of the following is true.

- **The methodology was not applied correctly.**
 - To show that a hydrologic methodology was not applied correctly, an appellant must submit the following:
 - New hydrologic analysis in which the original methodology has been applied differently;
 - Explanation for superiority of new application;
 - New hydraulic/floodway or coastal analysis based on flood discharge values from new hydrologic analysis;

- Revised Summary of Discharges Table and/or Flood Profiles and, if applicable, FDT; and
 - Revised SFHA zone boundary and, if applicable, regulatory floodway boundary delineations.
 - To show that a hydraulic methodology was not applied correctly, an appellant must submit the following information. *(Please note that an appeal to a floodway configuration cannot be solely based on surcharge values.)*
 - New hydraulic/floodway analysis, based on original flood discharge values, in which the original methodology has been applied differently;
 - As applicable, revised Flood Profiles, FDT and other FIS report tables as needed; and
 - Revised SFHA zone boundary and, if applicable, regulatory floodway boundary delineations.
 - To show that a coastal methodology was not applied correctly, an appellant must submit the following:
 - New coastal analysis, based on the original stillwater elevations, in which the original methodology has been applied differently;
 - Revised SFHA zone boundary and, all applicable FIS report tables, including the Transect Data Table.
- **The methodology was based on insufficient or poor-quality data.**
 - To show that insufficient or poor-quality hydrologic data were used, an appellant must submit the following:
 - Data believed to be better than those used in original hydrologic analysis;
 - Documentation for source of data;
 - Explanation for improvement resulting from use of new data;
 - New hydrologic analysis based on better data;
 - New hydraulic/floodway or coastal analysis based on flood discharge values resulting from new hydrologic analysis;
 - Revised Summary of Discharges Table, Flood Profiles and, if applicable, FDT; and
 - Revised SFHA zone boundary and, if applicable, regulatory floodway boundary delineations.
 - To show that insufficient or poor-quality hydraulic data were used, an appellant must submit the following:

- Data believed to be better than those used in original hydraulic analysis;
 - Documentation for source of new data;
 - Explanation for improvement resulting from use of new data;
 - New hydraulic analysis based on better data and original flood discharge values;
 - Revised Flood Profiles and, if applicable, FDT; and
 - Revised SFHA zone boundary and, if applicable, regulatory floodway boundary delineations.
 - To show that insufficient or poor-quality coastal analysis data were used, an appellant must submit the following:
 - Data believed to be better than those used in original coastal analysis;
 - Documentation for source of new data;
 - Explanation for improvement resulting from use of new data;
 - New coastal analysis based on better data and original stillwater elevation values; and
 - Revised SFHA zone boundary and, all applicable FIS report tables, including the Transect Data Table.
- **The application of the methodology included indisputable mathematical or measurement errors.**
 - To show that a mathematical error was made, an appellant must identify the error. FEMA will perform any required calculations and make the necessary changes to the FIS report and FIRM.
 - To show that a measurement error (e.g., an incorrect surveyed elevation used in the flood study, PMR, or LOMR) was made, appellants must identify the error and provide the correct measurement. Any new survey data provided must be certified by a Registered Professional Engineer or Licensed Land Surveyor. FEMA will perform any required calculations and make the necessary changes to the FIS report and FIRM.
- **The methodology did not account for the effects of natural physical changes that have occurred in the floodplain.**
 - For appeals based on the effects of natural physical changes that have occurred in the base floodplain, appellants must identify the changes that have occurred and provide the data FEMA needs to perform a revised analysis. The data may include new stream channel and floodplain cross sections or coastal transects.

3.2. Appeals to SFHA Boundaries

The supporting data required for changes to SFHA zone boundaries will vary, depending on whether the boundaries are for flooding sources studied by detailed methods or flooding sources studied by approximate methods, as discussed below.

Flooding sources studied by detailed methods

Usually, detailed SFHA zone boundaries are delineated using topographic data and the BFEs and base flood depths resulting from the hydraulic analysis performed for the flood study, PMR, or LOMR. If topographic data are more detailed than those used by FEMA or show more recent topographic conditions, appellants should submit that data and the revised SFHA zone boundaries for FEMA to incorporate into the affected map panels. All maps and other supporting data submitted must be certified by a Registered Professional Engineer or a Licensed Land Surveyor and must reflect existing conditions. Maps or data prepared by an authoritative source, such as the U.S. Army Corps of Engineers, U.S. Geological Survey, U.S. Bureau of Reclamation, or a State department of highways and transportation, are acceptable without certification as long as the sources and dates of the maps are identified. For further information on submittals involving topographic data, please refer to the section below *Additional Guidance on Appeal Submittals Involving Topographic Data*.

Flooding Sources Studied by Approximate Methods

Usually, where BFEs or base flood depths are not available, flood zone boundaries are delineated with the best available data, including flood maps published by other Federal agencies, information on past floods, and simplified hydrologic and hydraulic analyses. If more detailed data or analyses are submitted, FEMA will use them to update the flood hazard information shown on the affected map panels. Such data and analyses may include the following:

- Published flood maps that are more recent or more detailed than those used by FEMA;
- Analyses that are more detailed than those performed by FEMA or that are based on more detailed data than those used by FEMA;
- Topographic data and resulting updated SFHA boundaries.

For further information on submittals involving topographic data, please refer to the section below *Additional Guidance on Appeal Submittals Involving Topographic Data*.

Please note that, when applicable, appeals related to the *methodology* used to develop an approximate flood zone boundary must follow the guidelines established for appeals to BFEs, base flood depths, SFHA zone designations, or regulatory floodways under Section 3.1 above. However, since flood profiles, FDTs, Summary of Discharges Tables, Transect

Data Tables, and Summary of Stillwater Elevations Tables are not developed in support of approximate floodplain boundaries, these data will not need to be submitted for appeals to flooding sources studied by approximate methods.

All submitted data and analyses must be certified by a Registered Professional Engineer or a Licensed Land Surveyor. Maps prepared by an authoritative source, such as the U.S. Army Corps of Engineers, U.S. Geological Survey, U.S. Bureau of Reclamation, or a State department of highways and transportation, are acceptable without certification as long as the sources and dates of the maps are identified.

Additional Guidance on Appeal Submittals Involving Topographic Data

For appeal submittals that involve topographic data, the following additional guidelines must be followed:

- The data must be more detailed/accurate, and/or reflect more recent topographic conditions, and be in a digital Geographic Information System (GIS) format preferably;
- The appeal submittal must clearly state which flooding sources are being appealed based on the updated topographic data;
- Updated SFHA boundary delineations that reflect the submitted topographic data for each appealed flooding source must also be provided, preferably in digital GIS format;
- All topographic data submitted must adhere to FEMA's current data capture standards for such data;
- If necessary, a data sharing agreement must be provided.

4. Appeal Period Procedures

Appeals and comments must be resolved by following the procedures below:

- Acknowledgement by FEMA of the receipt of an appeal in writing, ensuring that acknowledged appeals include ALL of the criteria discussed above.
- Acknowledge the receipt of comments. This can be done either in writing, by FEMA, or through a documented phone conversation between the mapping partner and the community that submitted the comments. At a minimum FEMA must notify the community in writing that it did not receive any appeals. This can be done by separate correspondence or by the inclusion of language in the Letter of Final Determination (LFD).

- FEMA or the mapping partner will evaluate any scientific or technical data submitted for compliance with existing mapping statutes, regulations, or Guidelines and Standards.
- FEMA or the mapping partner will request any additional scientific or technical data required to properly review the appeal or comment.
- FEMA or the mapping partner will make a recommendation to FEMA on the resolution of the appeal or comment.
- FEMA or the mapping partner will prepare a draft appeal resolution letter (if **all** the criteria for an appeal are met).
- The assigned mapping partner shall dispatch the signed FEMA appeal resolution letter and if warranted, Revised Preliminary copies of the FIRM and FIS report to the community CEO and floodplain administrator and all appellants. All correspondence must be prepared and issued on FEMA Headquarters or FEMA Regional letterhead.
- FEMA provides a comment period of 30 days following the date the appeal or comment resolution letter is issued. Any comments received during the 30 day comment period must be addressed and resolved before proceeding with the LFD. Extensions to this 30 day period can only be granted with FEMA Headquarters approval.

5. General Technical Guidance

Detailed guidance on the supporting documentation that must be submitted in support of an appeal can be found in *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps—A Guide for Community Officials*.

Unless appeals are based on the use of alternative models or methodologies, the hydrologic and hydraulic analyses that appellants submit must be performed with the models used for the flood study, PMR, or LOMR. Generally, when appellants are required to submit hydrologic or hydraulic analyses, those analyses must be performed for the same recurrence interval floods as those performed for the flood study, PMR, or LOMR. The vertical datum used in any data submitted must match the datum used in the preliminary FIS report and FIRM. Further, SFHA boundaries are to be shown on a topographic map (preferably, in digital form) whose scale and contour interval are sufficient to provide reasonable accuracy.

New flooding information cannot be added to a FIRM in such a way as to create mismatches with the flooding information shown for unrevised areas. Therefore, in performing new analyses and developing revised flooding information, appellants must tie the new BFEs, base flood

depths, SFHA boundaries, SFHA zone designations, and/or regulatory floodway boundaries into those shown on the maps for areas not affected by the appeal.

All analyses and data submitted by appellants, including those that show mathematical or measurement errors must be certified by a Registered Professional Engineer or Licensed Land Surveyor, as appropriate.

6. Scientific Resolution Panel (SRP)

FEMA's Scientific Resolution Panel (SRP) process reinforces FEMA's commitment to work with communities to ensure the flood hazard data depicted on FIRMs is built collaboratively using the best science available.

When changes to the FIRMs are met with conflicting technical and scientific data, an independent third party review of the information may be needed to ensure the FIRMs are updated correctly. The SRP serves as the independent third party. To be eligible for an SRP, an appeal must include supporting information or data to substantiate that the BFEs, base flood depths, SFHA boundaries, SFHA zone designations, or floodways proposed by FEMA are scientifically or technically incorrect. An SRP request is an option only after FEMA and a local community have been engaged in a collaborative consultation process for at least 60 days without a mutually-acceptable resolution of an appeal.



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Appeals and Comments on Preliminary Maps and Reports for the California Open Pacific Coast Study: The Process

Introduction and Background

In support of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) has completed a coastal flood risk study for the California Coastal Analysis and Mapping Project, Open Pacific Coast Study (OPC). Based on the results of the study, FEMA has released Preliminary versions of the Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS) reports for selected California coastal counties, and associated products displaying proposed flood hazard information.

When flood hazard information is proposed through the issuance of a Preliminary FIRM and FIS report and associated products, FEMA provides community officials and property owners with an opportunity to review and comment on these products before they become effective for flood insurance and floodplain management purposes and to request changes to the information shown. This statutorily required, formal review and comment period is referred to as the *90-day appeal period*.

Where to Find the Preliminary FIRMs and FIS Reports

The Preliminary FIRMs and FIS reports are accessible through the FEMA Flood Map Service Center website at <http://msc.fema.gov/portal>.

How the Appeal Period Is Administered

The community Chief Executive Officer (CEO) is responsible for ensuring that a community meets its obligations as a participant in the NFIP. Therefore, the FEMA-led Project Team notifies the community CEO of the appeal period start and end dates, and consults and confers with appropriate community staff before, during, and after the appeal period. Community officials and property owners should address appeals and comments submitted during the 90-day appeal period to the CEO or to another local official designated by the CEO, such as the community floodplain administrator (FPA).

Appeal Period Provides Opportunity for Communities and Property Owners in the OPC Study Area to Request Changes to Preliminary FIRM and FIS Report

This Fact Sheet provides general information regarding the *90-day appeal period* established to allow community officials and others to request changes to the information shown on a Preliminary FIRM and/or FIS report developed as part of a FEMA coastal flood risk study for the OPC Study. The Preliminary FIRM and FIS report reflect the initial results of the coastal flood risk study performed by FEMA. The following are key terms pertinent to this process:

- **Appeal** – A formal objection to FEMA's proposed flood hazard determinations, submitted by the community CEO, FPA, or other community official designated by the CEO during the 90-day appeal period.
- **Proposed Flood Hazard Information In Coastal Study Areas** – New or revised Base Flood Elevations, Special Flood Hazard Areas, other flood hazard areas, flood insurance risk zone designations, and Primary Frontal Dune designations.
- **Comment** – A formal objection to information that is not related to the proposed flood hazard determinations, submitted by the CEO, FPA, or other community official designated by the CEO during the appeal period. Comments would include changes to road names and configurations, corporate limit boundaries, and requests that changes effected by Letter of Map Change be incorporated.
- **Effective FIRM and FIS Report** – The version of the FIRM and FIS report that reflect the final results of the FEMA study and that are used for administering NFIP flood insurance and floodplain management requirements.

Additional information regarding the coastal flood risk study process is provided on the California Coastal Analysis and Mapping Project website at www.r9coastal.org.

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In accordance with standard procedures, FEMA starts the 90-day appeal period by:

1. Publishing a Proposed Flood Hazard Determinations Notice in the FEDERAL REGISTER;
2. Preparing and posting a Proposed Flood Hazard Determinations notice to the FEMA website at www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp;
3. Publishing public notices announcing the start of the appeal period twice, at least 1 week apart, in local newspaper(s) with wide circulation, as identified by the community CEO or other designated community official(s); and
4. Mailing letters, referred to *as proposed flood hazard determination letters*, to notify the CEOs and FPAs in each of the mapped communities about the appeal period and the proposed flood hazard information.

The appeal period starts on the date of the second successful publication of the public notice in the identified local newspaper(s).

Any individual property owner who wishes to appeal the proposed flood hazard information or to comment on any other information shown on the Preliminary FIRM, Preliminary FIS report, or associated products is required to submit the appeal or comment, along with appropriate supporting data and documentation, to the appropriate CEO or designated local community official. This approach allows the community to comply with the requirements of Part 67 of the NFIP regulations, which implements the requirements established by the U.S. Congress for the appeal period.

The required supporting data and documentation are discussed in detail in a separate Fact Sheet titled "Appeals and Comments on Preliminary Maps and Reports for the California Open Pacific Coast Study Area: Supporting Data and Documentation."

The CEO, FPA, or other designated community official is required to review each appeal or comment to determine whether the data or documentation submitted are sufficient to be forwarded to the FEMA Region IX Office in Oakland, California for consideration. By reviewing the appeals and comments, the CEO, FPA, or other designated community official is better able to ensure that the community is meeting its obligations under NFIP regulations throughout the mapping process.

Where to Send Appeals and Comments

Property owners and other individuals who choose to submit appeals or comments should submit their written requests, along with the required supporting data and documentation, to the community CEO, FPA, or other designated community official.

The community CEO, FPA, or other designated community official is required to submit all appeals and comments, along with required supporting data and documentation, to the FEMA Region IX Office. The FEMA Region IX contact information for the submittal of appeals and comments is as follows:

FEMA Region IX
Attention: Ed Curtis
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

For More Information

Questions regarding the appeals process in general and the OPC Study in particular can be addressed to Ed Curtis, FEMA Regional Engineer, at edward.curtis@fema.dhs.gov.

For more information on the OPC Study, please visit the California Coastal Analysis and Mapping Project website, www.r9coastal.org.

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Appeals and Comments on Preliminary Maps and Reports for the California Open Pacific Coast Study: Supporting Data and Documentation

Introduction and Background

In support of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) has completed a coastal flood risk study for the California Coastal Analysis and Mapping Project, Open Pacific Coast (OPC) Study. Based on the results of the study, FEMA has released Preliminary versions of the Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS) reports for selected California coastal counties and associated products displaying proposed flood hazard information.

When flood hazard information is proposed through the issuance of a Preliminary FIRM and FIS report and associated products, FEMA provides community officials and property owners with an opportunity to review and comment on these products before they become effective and to request changes to the information shown. This statutorily required, formal review and comment period provided is referred to as the **90-day appeal period**.

The type and amount of supporting data and/or documentation required will vary based on the type of appeal or comment that is submitted. This Fact Sheet clarifies the data and documentation requirements that community officials and/or property owners must meet to submit a valid appeal or comment and obtain a change to the information shown on the Preliminary FIRMs and/or FIS reports for the OPC Study.

Supporting Data and Documentation for Appeals

A valid appeal must be based on data and documentation which demonstrate that the proposed flood hazard information shown on a FIRM and/or in an FIS report are **scientifically incorrect** or **technically incorrect**. The distinction between scientifically incorrect and technically incorrect is important because of the

Appeals and Comments Submitted by Communities and Property Owners in the OPC Study Area Must Be Supported by Data and Documentation

This Fact Sheet provides technical information regarding the supporting data and documentation that community officials and others must submit during the appeal period to request changes to the information shown on a Preliminary FIRM and/or FIS report developed as part of a FEMA coastal flood risk study for the OPC Study. The following are key terms pertinent to this process:

- **Appeal** – A formal objection to FEMA's proposed flood hazard determinations, submitted by the community CEO, FPA, or other community official designated by the CEO during the 90-day appeal period.
- **Proposed Flood Hazard Information In Coastal Study Areas** – New or revised Base Flood Elevations, Special Flood Hazard Areas, other flood hazard areas, flood insurance risk zone designations, and Primary Frontal Dune designations.
- **Comment** – A formal objection to information that is not related to the proposed flood hazard determinations, submitted by the CEO, FPA, or other community official designated by the CEO during the appeal period. Comments would include changes to road names and configurations, corporate limits boundaries, and requests that changes effected by Letter of Map Change.
- **Effective FIRM and FIS Report** – The version of the FIRM and FIS report that reflect the final results of the FEMA study and that are used for administering NFIP flood insurance and floodplain management requirements.

Additional information regarding the coastal flood risk study process is provided on the California Coastal Analysis and Mapping Project website at www.r9coastal.org.

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differences in the types and amounts of data that a community (or a private appellant through the community) must submit to demonstrate one versus the other. Definitions of those terms are provided later in this document.

First, however, it is appropriate to discuss the meaning of the word *correct* as it applies to the flood hazard information. The flood hazard information presented on the FIRM and in the FIS report is the result of engineering methodologies and computer models that were used by the FEMA-led Project Team. Because numerous methodologies and models have been developed for determining flood elevations and flood hazard boundaries, the Project Team followed FEMA's 2005 Final Draft Guidelines for Coastal Flood Hazard Analysis and Mapping for the Pacific Coast of the United States. Because the Guidelines do not always identify specific methodologies or models, the Project Team used their professional judgment in selecting methodologies and models that were appropriate for the study area. The Project Teams used the models below to conduct the coastal analysis for the OPC Study Area.

- The *Oceanweather Inc. (OWI) Global Reanalysis of Ocean Waves (GROW)* deepwater wave models are a series of nested wave models of increasing resolution used to generate a 50-year (1960-2009) hindcast of offshore waves along the California coast. Input to the OWI model includes bathymetry and wind data, with special attention to winds associated with extratropical events.
- The *Scripps Institution of Oceanography (SIO) SHELF* model is used to simulate the transformation of waves from deepwater to the nearshore area, with an emphasis on the accurate representation of extreme events. The model accounts for the impacts of island blocking, refraction, and shoaling and provides nearshore wave conditions at model output points with 100 to 200 meter alongshore spacing.
- The *DIM/TAW/Stockdon* models are a suite of equations used at coastal analysis transects to determine the wave setup and runup at the shoreline. An appropriate equation is selected depending on the backshore type, beach slope, and offshore wave conditions at each transect.
- The *Wave Height Analysis for Flood Insurance Studies (WHAFIS)* model uses representative transects to compute wave crest elevations in the study area. Transects are cross sections taken perpendicular to the shoreline that represent a segment of coast with similar characteristics. The

WHAFIS model uses topographic data and other onsite conditions to develop the flood hazard areas presented on FIRMs.

In general, because the methodologies are the result of attempts to reduce complex physical processes to mathematical models, the methodologies may include simplifying assumptions. As is usual for FEMA coastal studies, methodologies were applied to the affected study area using data developed specifically for the project and specifically for the study area. Therefore, the results of the methodologies are affected by the amount of data collected and the precision of any measurements made.

Because of the judgments and assumptions that were made, the correctness of the flood hazard information is often a matter of degree, rather than absolute. For that reason, an appellant who contends that the flood hazard information was incorrect because better methodologies could have been used, better assumptions could have been made, or better data could have been used must provide alternative analyses that incorporate such methodologies, assumptions, or data.

The appellant must quantify the effect on the flood hazard information presented on the Preliminary FIRM and in the Preliminary FIS report. The data and documentation required to support various types of appeals are discussed below.

Scientifically Incorrect Flood Elevations and/or Floodplain Boundaries

The flood elevations and floodplain boundaries shown on the Preliminary FIRM are said to be scientifically incorrect if the methodology/model(s) used in the determination of the elevations and/or boundaries is inappropriate or incorrect, or if the assumptions made as part of using the methodology/model(s) are inappropriate or incorrect. An appeal that is based on the flood elevations or floodplain boundaries being scientifically incorrect would, therefore, contend that the use of a different methodology/model or different assumptions would produce more accurate results.

To show that an inappropriate or incorrect coastal methodology has been used, a successful appellant must submit the following data, as appropriate, for the appeal:

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Page 3 Supporting Data and Documentation for Appeals and Comments

- New coastal analyses based on the alternative methodology and original stillwater flood elevations, which are the projected elevations that floodwaters would assume in the absence of waves resulting from wind effects;
- Explanation for the superiority of the alternative methodology/model;
- Revised Flood Profiles, Transect Data Table, and/or Coastal Transect Parameters Table for the FIS report, as applicable; and/or
- Revised 1-percent-annual-chance floodplain boundary delineations and/or 0.2-percent-annual-chance floodplain boundary delineations, as appropriate.

Revised floodplain boundaries must be delineated on a topographic map with a scale and a contour interval that meet FEMA standards.

Technically Incorrect Flood Elevations and/or Floodplain Boundaries

The flood elevations and floodplain boundaries shown on the Preliminary FIRM are said to be technically incorrect if at least one of the following is true:

- The methodology or models used for the study were not applied correctly.
- The methodology or models used for the study were based on insufficient or poor-quality data.
- The application of the methodology or models included indisputable mathematical or measurement errors.
- The methodology or models used for the study did not account for the effects of physical changes that have occurred in the floodplain.

Appeals Based on the Contention That the Methodology Was Not Applied Correctly

To show that a **coastal methodology was not applied correctly**, an appellant would have to submit the following:

- New coastal analysis in which the methodology (i.e., offshore and nearshore wave transformation modeling, WHAFIS, setup/runup equations) used by the Project Team has been applied differently;
- Revised Coastal Transect Parameters Table;

- Revised 1-percent-annual-chance floodplain boundary delineations; and
- Revised 0.2-percent-annual-chance floodplain boundary delineations (if such boundaries are shown on the Preliminary FIRM for the flooding source in question).

Revised floodplain boundaries must be delineated on a topographic map with a scale and a contour interval that meet FEMA standards.

Appeals Based on the Contention That Insufficient or Poor-Quality Meteorological Data Were Used

To show that insufficient or poor-quality meteorological data were used, an appellant would have to submit the following:

- Data believed to be better than the data used in the coastal analysis performed by the Project Team;
- Documentation for the source of the new data;
- Explanation for the improvement resulting from use of the new data;
- New coastal analysis based on the new data;
- New Coastal Transect Parameters Table;
- New Summary of Coastal Transect Mapping Considerations Table;
- Revised 1-percent-annual-chance floodplain boundary delineations; and
- Revised 0.2-percent-annual-chance floodplain boundary delineations (if such boundaries are shown on the Preliminary FIRM for the flooding source in question).

Revised floodplain boundaries must be delineated on a topographic map with a scale and a contour interval that meet FEMA standards.

Appeals Based on the Contention That the Analysis Contains Indisputable Errors

To show that a mathematical error was made, the appellant must identify the error. FEMA will then perform any required calculations and make the necessary changes to the FIRM, FIS report, and/or associated products.

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To show that a measurement error (e.g., an incorrect surveyed elevation used in the study) was made, the appellant must identify the error and provide the correct measurement.

Any new survey data provided by the appellant must be certified by a Registered Professional Engineer or Licensed Land Surveyor. FEMA will then perform any required calculations and make the necessary changes to the FIRM, FIS report, and/or associated products.

Appeals of Primary Frontal Dune Delineations in Coastal Areas

The Project Team determined that a **Primary Frontal Dune (PFD)** exists in certain parts of the study area. A PFD is a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach. The PFD is subject to erosion and overtopping from high tides and waves during major coastal storms.

The Project Team analyzed the dune to show how it will be affected by the 1-percent-annual-chance **total water level** (i.e., the increase in water level at the coast due to a major coastal storm event) and wave hazards. The analysis considered whether the dune is large enough to survive a storm of this magnitude and estimated the extent of erosion expected during the storm. The Project Team also performed analyses to estimate the flooding expected landward of the eroded dune.



The landward toe of a PFD is located at the point where there is a distinct change from a relatively steep slope to a relatively mild slope. The VE zone, also known as the **Coastal High Hazard Area (CHHA)**, was extended inland to the landward toe of the PFD. The CHHA is the area affected by high-velocity waves that are 3 feet or higher.

To change the delineation of the PFD, the appellant must submit the following:

- Written description of suggested changes to PFD mapping;
- Topographic data for the PFD area;
- Cross-shore survey transects of the PFD; and
- Revised mapping of the PFD.

Appeals of Floodplain Boundary Delineations Based on Newer or More Detailed Topographic or Elevation Data

The Project Team made every effort to use the most accurate and up-to-date topographic data available in delineating the floodplain boundaries in areas studied by detailed methods. However, if topographic maps or other ground elevation data that are of greater detail than those used by the Project Team or that show more recent topographic conditions are available, FEMA will use those data to revise the floodplain boundaries shown on the FIRM.

The approximate floodplain boundaries shown on the Preliminary FIRM were delineated using the best available data. If more detailed data or analyses are available, FEMA would use the submitted data or analyses to revise the floodplain boundary delineations. Such data and analyses would include the following:

- Published flood maps that are more recent or more detailed than those used by FEMA; and
- Analyses that are more detailed than those performed by the Project Team or that are based on better data than those used by the Project Team.

All maps and other supporting data provided by the appellant must be certified by a Registered Professional Engineer or Licensed Land Surveyor and must reflect existing conditions. Maps prepared by an authoritative source, such as a Federal agency (e.g., U.S. Army Corps of Engineers, U.S. Geological Survey, U.S. Bureau of Reclamation) or a State department of highways or transportation, are acceptable without certification as long as the sources and dates of the maps are identified.

For appeal submittals that involve topographic data, the following additional guidelines must be followed:

- The data must be submitted in a digital Geographic Information System (GIS) format.
- The appeal must clearly state which flooding source(s) are the subject of the appeal.
- They must include updated 1-percent-annual-chance floodplain boundaries, in digital GIS format.

All topographic data must adhere to the current FEMA data capture standards for such data. The appellant must provide a data sharing agreement, when necessary.

Supporting Data and Documentation for Comments

Challenges to the Preliminary FIRM and/or FIS report submitted during the 90-day appeal period that do not relate to new or modified flood hazard information are considered *comments*. Comments include, but are not limited to, the following:

- Impacts of changes that have occurred in the floodplain that should have previously been submitted in accordance with Section 65.3 of the NFIP regulations;
- Corporate limit changes;
- Road name and configuration changes;
- Requests to incorporate changes effected by a Letter of Map Change – i.e., Letter of Amendment (LOMA), Letter of Map Revision Based on Fill (LOMR-F), or Letter of Map Revision (LOMR);
- Base map errors; or
- Other possible omissions or potential improvements to the mapping.

The data and documentation that must be submitted to support comments are discussed below.

Impacts of Changes in a Floodplain That Were Not Submitted Previously to FEMA

As noted in [Section 65.3](#) of the NFIP regulations, the flood elevations in a community may increase or decrease as a result of physical changes affecting flooding conditions. Therefore, as soon as practicable, but not later than 6 months after the date such information becomes available, the community is to notify FEMA of the changes by submitting technical or scientific data in accordance with [Part 65](#) of the NFIP regulations.

For comments based on the effects of physical changes that have occurred in the 1-percent-annual-chance floodplain, appellants must identify the changes that have occurred and provide the data FEMA needs to perform a revised analysis. Required data might include the following:

- Topographic maps;
- Grading plans;
- New beach and floodplain transects; or
- Dimensions of structures.

Corporate Limit Changes

The corporate limits shown on the Preliminary FIRM were taken from community maps or other authoritative source materials obtained by the Project Team from community officials or other non-Federal sources, which must meet FEMA criteria, or USGS Digital Orthophoto Quadrangles. The Project Team used the Digital Orthophoto Quadrangles where community base map data either were not submitted or did not meet FEMA criteria.

If a community submits a comment to change the corporate limits shown on the FIRM, the community CEO, FPA, or other designated official must submit appropriate updates to the previously provided base map data or a geospatially accurate map that can be considered for revising the digital base map.

Road Name and Configuration Changes

On the preliminary version of the FIRM, the Project Team shows all roads that are in or adjacent to the mapped 1-percent-annual-chance floodplain. If a community or individual appellant chooses to submit a comment to change the locations and names of roads in or adjacent to the mapped 1-percent-annual-chance floodplains, the community CEO, FPA, or other designated official must submit appropriately registered maps or updates to the community-supplied base map data showing the names and locations of the new or revised roads.

Changes to Incorporate Effective Letters of Map Change

As part of the development of the Preliminary FIRM and FIS report, the Project Team incorporates all mappable amendments and revisions that were effected by FEMA through the issuance of LOMAs, LOMR-Fs, and LOMRs. To request that the results of an effective, mappable LOMA, LOMR-F, or LOMR be reflected on the FIRM and/or in the FIS report in the area where new or modified flood hazard information has been proposed, the CEO, FPA, or other designated community official must submit a written request indicating the case number and effective date of the LOMA, LOMR-F, or LOMR and/or a written request transmitting a copy of the LOMA, LOMR-F, or LOMR.

Changes to Correct Base Map Errors

To support a request that FEMA correct an error in the base map used for the FIRM, the community must submit appropriate updates to the previously provided base map data or a geospatially accurate map that can be considered for revising the digital base map.

General Technical Guidance

When developing technical support data or documentation, appellants need to consider the information below.

- Unless appeals are based on indisputable mathematical or measurement errors or the effects of physical changes that have occurred in the floodplain, they must be accompanied by all data that FEMA needs to revise the Preliminary FIRM panel(s) and FIS report materials. Therefore, for coastal flood hazard areas, appellants should be prepared to perform coastal analyses and to provide revised floodplain boundary delineations as necessary.
- New flood hazard information cannot be added to a FIRM panel in such a way as to create mismatches with the flood hazard information shown for adjacent FIRM panels. Therefore, in performing new analyses and developing revised flood hazard information, appellants must use good engineering judgment to tie the new flood elevations and floodplain boundaries into those shown on FIRM panel(s) for areas that are not affected by the appeal.
- For appeals involving new coastal flood levels, extensive changes in hydraulic conditions, or

complex situations in which changes made to the flood hazard information developed for one flooding source will affect the flood hazard information developed for others, appellants may be required to provide new information for a large portion of the mapped area.

- All analyses and data submitted by appellants, including those that show mathematical or measurement errors, must be certified by a Registered Professional Engineer or Licensed Land Surveyor, as appropriate.
- Appeals and comments cannot be based on the effects of proposed projects or future conditions.
- If coastal flooding analyses are performed, they must be performed for the same recurrence interval floods as those performed for the study.
- Unless appeals are based on the use of alternative models or methodologies, the coastal analyses that appellants submit must be performed using the coastal models used by the Project Team. The analysis methods used to study coastal flooding sources are documented in Section 5.3 of the Preliminary FIS report.
- Information on the models used for the analysis of the hazards associated with coastal flooding and wave action, including wave height and wave runup, are documented in Section 5.3 of the Preliminary FIS report.
- As required by Paragraph 65.6(a)(6) of the NFIP regulations, when appeals are based on the use of an alternative hydrologic or hydraulic model, the appellant must show that several conditions have been met.
 - The model used must have been reviewed and accepted for general use by a Federal agency responsible for floodplain identification or regulation or a notable scientific body.
 - The model has been well documented (with a user's manual that includes source codes).
 - The model must be available to all present and future parties affected by the FIRM that has been developed or amended through the use of the model.

RiskMAP
Increasing Resilience Together

- If appeals involve changing the floodplain boundaries shown on the Preliminary FIRM, the appellant is required to submit delineations of both the 1- and 0.2-percent-annual-chance floodplain boundaries because both 1- and 0.2-percent-annual-chance floodplain boundary delineations are shown on the Preliminary FIRM.
- Community officials may request that FEMA provide them with copies of the input and output data from the model(s) used by the Project Team or copies of other calculations or analyses performed by the Project Team.
- The community CEO, FPA, or other community official designated by the CEO should submit such requests, in writing, to the attention of Ed Curtis, FEMA Regional Engineer, at the address below:

FEMA Region IX
Attention: Ed Curtis
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

For More Information

Technical questions regarding the appeal process in general and the OPC Study in particular can be addressed to Ed Curtis, FEMA Regional Engineer, at edward.curtis@fema.dhs.gov.

For more information on the the OPC Study, please visit the California Coastal Analysis and Mapping Project website, www.r9coastal.org.

The 2005 Final Draft Guidelines for Coastal Flood Hazard Analysis and Mapping for the Pacific Coast of the United States can be viewed and downloaded at <http://www.fema.gov/media-library/assets/documents/34953>.

SCIENTIFIC RESOLUTION PANELS

Through its flood hazard mapping program—the Risk Mapping, Assessment, and Planning (Risk MAP) program—the Federal Emergency Management Agency (FEMA) identifies flood hazards, assesses flood risks, and partners with States and communities to provide accurate flood hazard and risk data to guide them in taking effective mitigation actions. The resulting National Flood Insurance Program (NFIP) maps provide the basis for community floodplain management regulations and flood insurance requirements.

What is a Scientific Resolution Panel?

FEMA's Scientific Resolution Panel (SRP) process reinforces FEMA's commitment to work with communities to ensure the flood hazard data depicted on Flood Insurance Rate Maps (FIRMs) are developed collaboratively, using the best science available.

Flood hazards are constantly changing, and FEMA regularly updates FIRMs through several methods to reflect those changes. When proposed changes to a FIRM are met with conflicting technical and/or scientific data during a regulatory appeal period, an independent third-party review of the information may be appropriate. An SRP serves as an independent third party.

The SRP process benefits both FEMA and the community:

- ▶ It offers a neutral review process by independent third parties.
- ▶ It confirms FEMA's commitment to using the best science for the purpose of accurately depicting flood hazards on flood maps.
- ▶ It provides an additional opportunity for resolving community appeals involving conflicting technical and/or scientific data.

While FEMA had previously established an SRP process, the Biggert-Waters Flood Insurance Reform Act of 2012 formally established a statutory SRP process. The *Appeal and Comment Processing Guidance for Flood Risk Analysis and Mapping* incorporates the legislative requirements for the SRP.

For Additional Information

For more information on appeals, see the FEMA document *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials* at www.fema.gov/media-library/assets/documents/17930

Part 67 of the NFIP regulations, which pertains to appeals, is available at <http://www.fema.gov/guidance-documents-other-published-resources>

FEMA's Guidelines and Standards for Flood Risk Analysis and Mapping webpage includes *Appeal and Comment Processing Guidance for Flood Risk Analysis and Mapping*: www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping

Templates and Other Resources: www.fema.gov/media-library/assets/documents/32786?id=7577

Other Important Links:

- NIBS Scientific Review Panel website: www.floodsrp.org/
- Risk MAP: www.fema.gov/risk-mapping-assessment-and-planning-risk-map
- Information on Recent and Upcoming Map Changes: www.fema.gov/status-map-change

RISK MAPPING, ASSESSMENT, AND PLANNING PROGRAM (RISK MAP)

The Federal Emergency Management Agency's Risk MAP Program delivers quality data that increases public awareness and leads to action to reduce risk to life and property. Risk MAP is a nationwide program that works in collaboration with states, tribes, and local communities using best available science, rigorously vetted standards, and expert analysis to identify risk and promote mitigation action, resulting in safer, more resilient communities.

Who Can Request an SRP?

A community, tribe, or other political entity with the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction can request that FEMA use an SRP when conflicting technical and/or scientific data have been presented. For additional information, please see the *Appeal and Comment Processing Guidance for Flood Risk Analysis and Mapping*.

When Can Communities Request an SRP?

A community can request an SRP if the following requirements have been met:

- ▶ It has not yet received a Letter of Final Determination (LFD) from FEMA.
- ▶ Conflicting technical and/or scientific data, submitted during the 90-day appeal period, resulted in different flood hazards than those proposed by FEMA.
- ▶ At least 60 days of community consultation with FEMA (but no more than 120 days) have taken place.

Additionally, a community that receives a FEMA-issued resolution letter and has not previously exercised the SRP process will have 30 days from the issuance of the letter to request an SRP.

Independent Panel Sponsor

The SRP process is managed by the National Institute for Building Sciences (NIBS), a non-profit organization independent of FEMA. NIBS will act as the Panel Sponsor and coordinate the SRPs, ensuring that proper guidelines and procedures are employed and maintaining a cadre of experts from which Panel members are selected.

Panel Member Selection

Five panelists are convened for each appeal brought to the SRP request. Panel members are technical experts in surface water hydrology, hydraulics, coastal engineering, and other engineering and scientific fields that relate to the creation of FIRMs and Flood Insurance Studies throughout the United States.

Based on the technical challenges associated with each request, NIBS develops a list of potential members with relevant expertise, from its cadre of experts. NIBS also checks that those listed are available to serve, do not reside in the State from which the appeal or data were filed, and have no personal or professional interest in its findings for the flood risk project.

NIBS provides the list to the community and FEMA to select the Panel members. The community selects at least the simple majority (three), and FEMA selects the remaining Panel members from the short list of cadre members, based on the technical challenges of the appeal or data submittal.

The Process

To request an SRP, the community's Chief Executive Officer or designee completes an SRP Request Form and submits it to FEMA during the time periods outlined above. Once FEMA confirms that the situation and the conflicting technical and/or scientific data are eligible for an SRP, it forwards the SRP Request Form to NIBS, which will initiate the Panel selection process and develop a list of potential members.

Once the Panel is convened, Panel members are provided with a summary of the issue, FEMA's data, and the data the community submitted during the 90-day appeal period. Panel members review the data and, on a point-by-point basis, deliberate and make a decision based on the scientific and/or technical challenges.

If the community feels it is necessary to make an oral presentation in support of its request, it must include a justification on the SRP Request Form.

Resolution

The Panel must present its written report to the community and FEMA within 90 days of being convened, and that report will be used by the FEMA Administrator for making the final determination. A Panel determination must be in favor of either FEMA or the community on each distinct element of the dispute, and the Panel may not offer any alternative determination as a resolution. In the case of a dispute submitted by the community on behalf of an owner or lessee of real property in the community, the Panel determination must be in favor of either FEMA, the community, or the owner/lessee on each distinct element of the dispute.

If changes to the maps are recommended in the Panel's determination, and FEMA elects to implement the Panel's determination, FEMA will incorporate the changes into a revised Preliminary FIRM and, if appropriate, Flood Insurance Study report. The revised products will be available to the community for review, with a resolution letter, before FEMA issues an LFD.

Once the SRP provides its determination and FEMA's resolution letter is issued to implement the recommendations, the SRP recommendations are binding on all appellants and not subject to judicial review.

If the FEMA Administrator elects not to accept the Panel's findings, the Administrator will issue a written justification within 60 days of receiving the report from the SRP. Under these circumstances, the appellants maintain their right to appeal FEMA's final determination to the appropriate Federal District Court.

Figure 1: SRP Timeline

