

WA State Frequently Flooded Areas

Planning and Regulatory Resources

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[Channel Migration Zones](#)

[CMZ Guidance](#)

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WA State Frequently Flooded Areas Planning and Regulatory Resources

Online Guidance & Resources:

- [Ecology Floodplain Management Webpage](#)
- [Ecology Channel Migration Zone Webpage](#)
- [Ecology Frequently Flooded Areas Webpage](#)
- [Channel Migration Zone Delineation Guidance](#)
- [Ecology Guidance to Local Governments on Frequently Flooded Areas Update in CAO's](#)
- [WA Dept. of Commerce CAO Handbook](#)
- [Sea Level Rise in Washington State—A 2018 Assessment](#)
- [After the Fire Webpage](#)
- [Coastal Flood Exposure Mapper, NOAA's Office for Coastal Management](#)

*Floodplain Development Permit
Application for «Community»*

OFFICE USE ONLY

Date Received:

File Number:

SECTION I: Applicant and Project Information

GENERAL INFORMATION

1. No work of any kind may begin in a floodplain until a floodplain development permit is issued.
2. The permit may be revoked if any false statements are made in this application.
3. If revoked, all work must cease until a permit is re-issued.
4. The development may not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within 6 months of the date of issue.
6. The permit will not be issued until any other necessary local, state or federal permits have been obtained.

By signing and submitting this application, the Applicant gives consent to the local Floodplain Administrator or his/her representative to make reasonable inspections prior to the issuance of a Certificate of Compliance.

By signing and submitting this application, the Applicant certifies that all statements contained in SECTION I of the application, and in any additional attachments submitted by the Applicant, are true and accurate.

OWNER INFORMATION

Property Owner: _____ Mailing Address: _____

Telephone Number: _____

Email Address: _____

Signature of Property Owner: _____ Date: _____

APPLICANT INFORMATION

Applicant: _____ Brief project description: _____

Telephone Number: _____

Email Address: _____

Signature of Applicant: _____

PROJECT INFORMATION

Project Address: _____

Subdivision: _____

Lot: _____

Block: _____

PROJECT INFORMATION (continued)

Type of Structure:

- Residential
- Garage/Shop
- Non-Residential
 - Elevated
 - Floodproofed
- Combined Use (Residential and Non-Residential)
- Manufactured Home

Type of Structural Activity:

- New Structure
- Addition to Existing Structure*
- Alteration of Existing Structure*
- Relocation of Existing Structure **
- Demolition of Existing Structure
- Replacement of Existing Structure**

*** Substantial Improvement**

If the fair market value of an addition or alteration to a structure equals or exceeds 50% of the value of the structure before the addition or alteration, the entire structure must be treated as a substantially improved structure.

Substantial Improvement Evaluation:

Cost of Improvement (a): \$ _____

Market Value of the Building (b) : \$ _____

Percent of Value Change (a/b): _____ %

Disclaimer: Substantial Improvement Evaluation must be supported by project cost documentation and approved market evaluation. Attach supporting documentation.

**** Relocation or Replacement**

A relocated structure or a structure being replaced must be treated as new construction.

Other Development Activities

- Excavation (not related to a structural development)
- Clearing
- Placement of Fill Material
- Grading
- Mining
- Drilling
- Dredging
- Watercourse alteration
- Drainage improvement (including culvert work)
- Individual water or sewer system (not included to a structural development listed above)
- Roadway or bridge construction
- Specify other development not listed above:

PROPERTY OWNER SIGNATURE

I certify that to the best of my knowledge the information contained in the application is true and accurate.

Signature of Property Owner:

Date:

SECTION II: (To be completed by Floodplain Administrator)

FLOOD INFORMATION

1. The proposed development is located on FIRM map panel: _____ (number and suffix)
2. Effective date on the FIRM: _____
3. The proposed development is located in Zone _____
4. Is the proposed development located within the regulatory floodway: No Yes
*(New residential structures, additions, and substantial improvements prohibited;
Non-residential: Attach Completed Engineer's Hydraulic Analysis for a No-Rise Certificate)*

Structural Development

For structures, the provisions of the flood ordinance specify that the lowest floor be elevated one foot or more above the base flood elevation (BFE) (Zone AE); one foot above the depth number (Zone AO); or two feet above highest adjacent grade (Zone A).

Base Flood Elevation: _____ NGVD 29 NAVD 88 Unknown (Zone A)

Base Flood Depth (Zone AO): _____ (feet above highest adjacent grade)

Lowest Floor Elevation for the proposed development is: _____ NGVD 29 NAVD 88
 Feet above highest adjacent grade (AO/A)

Source of Base Flood Elevation: FIRM FIS or other: _____

The following documents are required:

- An Elevation Certificate (Finished Construction) *
- Site Plan (Showing location of SFHA and development)

The following documents may be required:

- Floodproofing Certificate * – required if floodproofing a non-residential structure
- A No-Rise Certificate * – if any of the proposed non-residential development is in a "regulatory floodway"
- An elevation study showing BFEs on developments/ subdivisions exceeding 50 lots or 5 acres in Zone A

** Certificates require completion by a Professional Land Surveyor or Registered Professional Engineer as indicated.*

SECTION III: (To be completed by Floodplain Administrator)

Permit Determination

I have determined that the proposed development: IS IS NOT (non-conformance described in separate document) in conformance with the local Flood Damage Prevention Ordinance.

The Floodplain Development Permit: IS IS NOT (denials are described in separate document) issued subject to any conditions attached to and made part of this permit.

Signature of Floodplain Administrator: _____ Date: _____

CONDITIONS:

1. All enclosures below the BFE shall have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area. The bottom of all openings shall be no higher than one foot above grade.
2. All mechanical devices, plumbing, and electrical systems shall be installed above the BFE.
3. An updated Elevation Certificate with the as-built elevations is required upon project completion.
4. Enclosures below the BFE shall be used only for parking, building access, and limited storage.
- 5.
- 6.

SECTION IV: (To be completed by Floodplain Administrator)

Administrative

Final documentation verifying compliance with ordinance

Elevation Certificate attached (Finished Construction)

As-Built lowest floor elevation: _____ NGVD 29 NAVD 88

Adequate flood venting

Adequate utility elevation and floodproofing

Notes: _____

Work Inspected by: _____

Certificate of Compliance

Certificate of Compliance is issued and the development is found to be in compliance with all applicable ordinances.

Signature of Floodplain Administrator

Date

Permit # _____

Applicant: _____

PLAN REVIEW CHECKLIST

Flood Hazard Area Application Review

Areas in Zone A or AO (without BFE)

Note: ALL forms of development in the Special Flood Hazard Area require a floodplain development permit. This includes structures of any size, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

BFE = Base Flood Elevation

Section 1: General Information
<p>Site plan shows nature of development proposal, location, dimensions, floodplain boundaries, wetland locations, and shoreline jurisdiction.</p> <p><input type="checkbox"/> YES Continue review. <input type="checkbox"/> NO Return to applicant to revise application and site plan.</p>
<p>Flood Zone</p> <p><input type="checkbox"/> 100-YEAR FLOODPLAIN, Zone A or AO Must meet flood resistant requirements in flood damage prevention ordinance For Zone AE, A1-30, or AH, please use associated checklist.</p> <p><input type="checkbox"/> 500-YEAR FLOODPLAIN. Floodplain review not required; flood-resistance encouraged. If critical facility, encourage additional flood resilience per code.</p>
<p>Additions, Alterations, and Remodels: Is a substantial improvement being proposed or has substantial damage occurred?</p> <p><input type="checkbox"/> NO Continue review. <input type="checkbox"/> YES or UNSURE Require market value cost estimates for the improvement (or damage) and the structure prior to the improvement (or damage). If the improvement (or damage) is more than 50% of the value of the structure, require the structure to be retrofitted for compliance with flood code. (See FEMA guidance such as P-758)</p> <p><input type="checkbox"/> HISTORIC STRUCTURE Structures listed on a National Register of Historic Places or a State Inventory of Historic Places are exempted from this requirement.</p>
<p>Is any part of the structure below grade on all sides? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Caution! These are considered "basements", no matter the depth below grade, and are prohibited unless the provisions of FEMA Technical Bulletin 11 are adopted in your ordinance and followed.</p>
<p>Has the applicant provided copies of all necessary State and federal permits?</p> <p><input type="checkbox"/> NO Advise applicant which agencies to contact. Require copies for the file. <input type="checkbox"/> YES Require copies for the file.</p>
<p>Will a watercourse be altered?</p> <p><input type="checkbox"/> NO Continue review. <input type="checkbox"/> YES Applicant to provide copies of notices to adjacent communities, federal agencies (e.g. CLOMR application), and the NFIP State Coordinator. Engineer's analysis required to show flood carrying capacity is maintained; method of maintenance specified.</p>

Section 2: Specific Requirements – Residential

For elevated structures (e.g. finished living space):

BFE (Locally determined or calculated, optional): _____ NAVD88 NGVD29

Depth Number (Zone AO): _____ feet

Minimum lowest floor elevation _____

(BFE + 1' or Depth Number + 1' (Zone AO) or 2' above highest adjacent grade)

Square feet of enclosed area below lowest floor elevation: _____ N/A – Fill

Minimum square inches of flood openings: _____ N/A – Fill

At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' max above ground

Required Documentation:

- Elevation Certificate marked "finished construction."
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - (Section C/D: Not required unless for LOMA or LOMR-F application)
 - Section E: Completed by property owner or floodplain administrator
 - Building photographs included
- If engineered vents: engineer's certification verifying opening allowance
- Zone AO: Require drainage paths to guide floodwaters around and away from structures

For **wet floodproofed** structures (e.g. garages below BFE): (must be used for parking, limited storage, or building access only)

- Attached garage
- Detached garage/shop/shed (Variance may be required. See FEMA Floodplain Management Bulletin P-2140)

Square feet of enclosed area: _____

Minimum square inches of flood openings: _____

At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' above ground

Required Documentation:

- Elevation Certificate marked "finished construction." (Attached garages to be on same EC as home)
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - Section E: Completed by property owner or floodplain administrator
 - Building photographs included
- If engineered vents: engineer's certification verifying opening allowance
- Variance (Large accessory structures; See FEMA Floodplain Management Bulletin P-2140)
- Require flood resistant materials below flood protection elevation (BFE+1, Depth No.+1, or HAG+2)
- Zone AO: Require drainage paths to guide floodwaters around and away from structures

For manufactured housing units (In addition to above):

- Foundation is reinforced (dry-stack blocks not allowed)
- Ground anchors and tie-downs to prevent flotation

Utilities:

- Electrical, mechanical, plumbing, heating/air conditioning components elevated
- Septic designed to minimize inflow/discharge under flood conditions
- On-site water supply designed to minimize inflow under flood conditions
- Above-ground tanks are anchored/elevated
- Below-ground tanks are designed to resist flotation

Section 3: Specific Requirements – Non-Residential

For elevated structures (e.g. finished commercial or industrial space):

BFE (Locally determined or calculated, optional): _____ NAVD88 NGVD29

Depth Number (Zone AO): _____ feet

Minimum lowest floor elevation _____
 (BFE + 1' or Depth Number + 1' (Zone AO) or 2' above highest adjacent grade)

Square feet of enclosed area below BFE: _____ N/A – Fill

Minimum square inches of flood openings: _____ N/A – Fill
 At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' max above ground

Required Documentation:

- Elevation Certificate marked "finished construction."
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - Section E: Completed by property owner or floodplain administrator
 - Building photographs included
- If engineered vents: engineer's certification verifying opening allowance

Zone AO: Require drainage paths to guide floodwaters around and away from structures

For dry floodproofed structures (non-residential only):

BFE (Locally determined or calculated, optional): _____ NAVD88 NGVD29

Depth Number (Zone AO): _____ feet

Minimum floodproofing elevation _____
 (BFE + 1' or Depth Number + 1' (Zone AO) or 2' above highest adjacent grade)

Required Documentation:

- Floodproofing certificate completed by a registered engineer
- Elevation Certificate marked "finished construction."
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Section B: Filled out by floodplain administrator
 - Section E: Completed by property owner or floodplain administrator
 - Building photographs included

Zone AO: Require drainage paths to guide floodwaters around and away from structures

For wet floodproofed structures (accessory buildings or agricultural structures only):

*Variance may be required. See FEMA Floodplain Management Bulletin P-2140

- Agricultural structure
- Small accessory structure (equivalent to one story, two car garage or smaller)
- Other accessory structure

Square feet of enclosed area: _____

Minimum square inches of flood openings: _____

At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' above ground

Required Documentation:

- Elevation Certificate marked "finished construction."
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - Section E: Completed by property owner or floodplain administrator
 - Building photographs included
- If engineered vents: engineer's certification verifying opening allowance
- Variance, if required by FEMA Floodplain Management Bulletin P-2140

- Require flood resistant materials below flood protection elevation (BFE+1, Depth No.+1, or HAG+2)
- Zone AO: Require drainage paths to guide floodwaters around and away from structures

Utilities:

- Electrical, mechanical, plumbing, heating/air conditioning components elevated above BFE and shown on EC
- Septic designed to minimize inflow/discharge under flood conditions
- On-site water supply designed to minimize inflow under flood conditions
- Above-ground tanks are anchored/elevated
- Below-ground tanks are designed to resist flotation

Section 4: Permit Approval

- Record permit in log of floodplain development permits
- Make sure that all necessary documents are in the file
- Issue permit
- Transfer file to Inspections

Permit # _____

Applicant: _____

INSPECTION CHECKLIST

Flood Hazard Area Building Inspection

Inspection Steps
Before site inspection: <input type="checkbox"/> REVIEW permit file before going in the field. <input type="checkbox"/> ASK permit reviewer questions to understand requirements. <input type="checkbox"/> Are other State and federal permits in the file?
Measure stake out distances from waterway or landmark. Is development in the right place? Is fill correct distance from waterway or landmark? <input type="checkbox"/> YES, check fill compaction and side slopes. <input type="checkbox"/> NO, take enforcement action to correct problems.
Elevation of lowest floor checked during framing or foundation inspection after lowest floor is in place. Elevations checked and acceptable? <input type="checkbox"/> YES, maintain copy of documentation of final elevations in permanent records. <input type="checkbox"/> NO, take enforcement action to correct problems.
Electrical, mechanical, plumbing, heating/air conditioning components elevated? <input type="checkbox"/> YES. <input type="checkbox"/> NO, take enforcement action to correct problems.
For enclosures below BFE (including crawl spaces), check that: <input type="checkbox"/> Flood damage resistant materials are used <input type="checkbox"/> Enclosure appears to be limited to crawl space, parking, building access, or limited storage <input type="checkbox"/> Flood openings no more than 12" above grade <input type="checkbox"/> Enough flood openings installed (based on net open area provided by the flood openings or certification of engineered openings) <input type="checkbox"/> Flood openings on at least two separate sides of the structure <input type="checkbox"/> Flood openings allow <i>automatic</i> entry/exit of floodwater (no human intervention needed) <input type="checkbox"/> Building does not have enclosures below BFE. <input type="checkbox"/> For any other unchecked items: take enforcement action to correct problems.
Other Notes Based on Inspection:

Final Inspection Completed By: _____ Date: _____

Permit # _____

Applicant: _____

FINAL APPROVALS

Flood Hazard Area Development

Ensure that the following information is in the file

All Applications:

- Approved floodplain development permit
- Elevation Certificate, marked "finished construction," reviewed for accuracy
- All other required local, state, and federal permits
- Approved Building Inspection checklist

Site Specific Documents:

- If engineered vents: engineer's certification verifying opening allowance

Dry Floodproofed non-residential structures:

- Floodproofing certificate completed by a registered engineer

Floodway:

- "No-rise" certificate completed by a registered engineer (or CLOMR if rise will occur)
 - LOMR to be submitted within 6 months of completion of construction if CLOMR required

Watercourse Alterations:

- Copies of notices to adjacent communities, federal agencies (e.g. CLOMR application), and the NFIP State Coordinator.
- Engineer's analysis showing how flood carrying capacity is maintained

- Issue Certificate of Occupancy

Permit # _____

Applicant: _____

PLAN REVIEW CHECKLIST

Flood Hazard Area Application Review

Areas in AE, A1-30, Floodway, AO, or AH Zones

Note: ALL forms of development in the Special Flood Hazard Area require a floodplain development permit. This includes structures of any size, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Section 1: General Information

Site plan shows nature of development proposal, location, dimensions, floodplain/floodway boundaries, wetland locations, and shoreline jurisdiction.

- YES Continue review. NO Return to applicant to revise application and site plan.

Flood Zone

- 100-YEAR FLOODPLAIN
Must meet flood resistant requirements in flood damage prevention ordinance
- FLOODWAY, RESIDENTIAL
New structures, substantial improvements, and increase in building footprint prohibited. Verify that project is _____ before continuing review.
- FLOODWAY, NON-RESIDENTIAL OR ACCESSORY STRUCTURE
Require engineer's "no-rise" analysis and supporting hydraulic data before continuing review.
- 500-YEAR FLOODPLAIN. Floodplain review not required; flood-resistance encouraged. If critical facility, encourage additional flood resistance per code.

Additions, Alterations, and Remodels: Is a substantial improvement being proposed or has substantial damage occurred?

- NO Continue review.
- YES or UNSURE Require market value cost estimates for the improvement (or damage) and the structure prior to the improvement (or damage). If the improvement (or damage) is more than 50% of the value of the structure, require the entire structure to be retrofitted for compliance with flood code.
- HISTORIC STRUCTURE Structures listed on a National Register of Historic Places or a State Inventory of Historic Places are exempted from this requirement.

Is any part of the structure below grade on all sides? YES NO

Caution! These are considered "basements", no matter the depth below grade, and are prohibited unless the provisions of FEMA Technical Bulletin 11 are adopted in your ordinance and followed.

Has the applicant provided copies of all necessary State and federal permits?

- NO Advise applicant which agencies to contact. Require copies for the file.
- YES Require copies for the file.

Will a watercourse be altered?

- NO Continue review.
- YES Applicant to provide copies of notices to adjacent communities, federal agencies (e.g. CLOMR application), and the NFIP State Coordinator. Engineer's analysis required to show flood carrying capacity is maintained; method of maintenance specified.

Is the project located in a Puget Sound watershed?

- NO Continue review.
- YES A Habitat Assessment may be required. Please refer to FEMA guidance and templates.

Section 2: Specific Requirements – Residential

For elevated structures (e.g. finished living space):

Zone AE, A1-30, or AH

BFE: _____ NAVD88 NGVD29 Vertical Datum
Obtain Base Flood Elevation (BFE) from Flood Insurance Study flood profiles

Minimum lowest floor elevation (BFE + 1') _____

Zone AO

Depth Number: _____ feet above highest adjacent grade
Obtain Depth Number from Flood Insurance Rate Map

Minimum lowest floor elevation (Depth + 1') _____ Measured above highest adjacent grade

- Adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures

All Flood Zones

Square feet of enclosed area below BFE: _____ or N/A – Fill to above BFE

Minimum square inches of flood openings: _____ or N/A – Fill to above BFE
At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' above ground

Required Documentation:

- Elevation Certificate marked “finished construction.”
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - Section C/D: Completed and stamped by licensed surveyor
 - Building photographs included
- If engineered vents: engineer’s certification verifying opening allowance
- If AE Zone without floodway: engineer’s analysis showing no more than 1’ cumulative rise in BFE

For wet floodproofed structures (e.g. garages below BFE): (must be used for parking, limited storage, or building access only)

- Attached garage
- Detached garage/shop/shed (*Variance may be required. See FEMA Floodplain Management Bulletin P-2140)

BFE: _____ NAVD88 NGVD29 Vertical Datum
Obtain from Flood Insurance Study flood profiles

Or Depth Number if Zone AO: _____

Square feet of enclosed area below BFE: _____

Minimum square inches of flood openings: _____
At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' above ground

Required Documentation:

- Elevation Certificate marked “finished construction.” (Attached garages to be on same EC as home)
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - Section C/D: Not required for low-cost sheds

Building photographs included

If engineered vents: engineer's certification verifying opening allowance

Variance (Large accessory structures; See FEMA Floodplain Management Bulletin P-2140)

If AE Zone without floodway: engineer's analysis showing no more than 1' cumulative rise in BFE

Require flood resistant materials below flood protection elevation (BFE + 1')

For manufactured housing units (In addition to above):

Foundation is reinforced (dry-stack blocks NOT allowed)

Ground anchors and tie-downs to prevent flotation

Utilities:

Electrical, mechanical, plumbing, heating/air conditioning components elevated above BFE and shown on EC

Septic designed to minimize inflow/discharge under flood conditions

On-site water supply designed to minimize inflow under flood conditions

Above-ground tanks are anchored/elevated

Below-ground tanks are designed to resist flotation

Section 3: Specific Requirements – Non-Residential

For elevated structures (e.g. finished commercial or industrial space):

Zone AE, A1-30, or AH

BFE: _____ NAVD88 NGVD29 Vertical Datum
 Obtain Base Flood Elevation (BFE) from Flood Insurance Study flood profiles

Minimum lowest floor elevation (BFE + 1') _____

Zone AO

Depth Number: _____ feet above highest adjacent grade
 Obtain Depth Number from Flood Insurance Rate Map

Minimum lowest floor elevation (Depth + 1') _____ Measured above highest adjacent grade

Adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures

All Zones:

Square feet of enclosed area below BFE: _____ N/A – Fill to above BFE

Minimum square inches of flood openings: _____ N/A – Fill to above BFE
 At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' above ground

Required Documentation:

If in floodway: "no-rise" certificate completed by a registered engineer (or CLOMR if rise will occur)

Elevation Certificate marked "finished construction."

Section A: Filled out by property owner, surveyor, or floodplain administrator

Venting requirements meet minimum criteria

Section B: Filled out by floodplain administrator

Section C/D: Completed and stamped by licensed surveyor

Building photographs included

If engineered vents: engineer's certification verifying opening allowance

If AE Zone without floodway: engineer's analysis showing no more than 1' cumulative rise in BFE

For dry floodproofed structures (non-residential only):

BFE: _____ NAVD88 NGVD29 Vertical Datum
Obtain from Flood Insurance Study flood profiles

Or Depth Number if Zone AO: _____

Minimum floodproofing elevation (BFE + 1) _____

Or Depth Number + 1 if Zone AO: _____

Required Documentation:

- Floodproofing certificate completed by a registered engineer
- If in floodway: "no-rise" certificate completed by a registered engineer (or CLOMR if rise will occur)
- If AE Zone without floodway: engineer's analysis showing no more than 1' cumulative rise in BFE
- Elevation Certificate marked "finished construction."
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Section B: Filled out by floodplain administrator
 - Section C/D: Completed and stamped by licensed surveyor
 - Building photographs included

For wet floodproofed structures (accessory buildings or agricultural structures only):

*Variance may be required. See FEMA Floodplain Management Bulletin P-2140

- Agricultural structure
- Small accessory structure (equivalent to one story, two car garage or smaller)
- Other accessory structure

BFE: _____ NAVD88 NGVD29 Vertical Datum
Obtain from Flood Insurance Study flood profiles

Or Depth Number if Zone AO: _____

Square feet of enclosed area below BFE: _____

Minimum square inches of flood openings: _____

At least 1 sq. in. of opening per sq. ft. enclosed area; Located on 2 or more walls; 1' above ground

Required Documentation:

- If in floodway: "no-rise" certificate completed by a registered engineer (or CLOMR if rise will occur)
- Elevation Certificate marked "finished construction."
 - Section A: Filled out by property owner, surveyor, or floodplain administrator
 - Venting requirements meet minimum criteria
 - Section B: Filled out by floodplain administrator
 - Section C/D: Not required
 - Building photographs included
- If engineered vents: engineer's certification verifying opening allowance
- If AE Zone without floodway: engineer's analysis showing no more than 1' cumulative rise in BFE
- Variance, if required by FEMA Floodplain Management Bulletin P-2140
- Require flood resistant materials below flood protection elevation (BFE + 1')

Utilities:

- Electrical, mechanical, plumbing, heating/air conditioning components elevated above BFE and shown on EC
- Septic designed to minimize inflow/discharge under flood conditions
- On-site water supply designed to minimize inflow under flood conditions

- Above-ground tanks are anchored/elevated
- Below-ground tanks are designed to resist flotation

Section 4: Floodway Encroachments or Floodplain Alterations

- Floodway encroachment
 - "No-rise" certificate completed by a registered engineer
- OR:

 - CLOMR documentation if zero rise cannot be met, including required notifications
 - Community Acknowledgement Form
 - LOMR documentation following construction
- Alteration of watercourse or boundaries of SFHA
 - Notification to Department of Ecology and FEMA
 - Demonstration that flood carrying capacity is maintained over time
 - LOMR documentation following construction, if required
- AE Zone without floodway: engineer's analysis showing no more than 1' cumulative rise in BFE

Section 5: Permit Approval

- Record permit in log of floodplain development permits
- Make sure that all necessary documents are in the file
- Issue permit
- Transfer file to Inspections

Permit # _____

Applicant: _____

INSPECTION CHECKLIST

Flood Hazard Area Building Inspection

Inspection Steps
Before site inspection: <input type="checkbox"/> REVIEW permit file before going in the field. <input type="checkbox"/> ASK permit reviewer questions to understand requirements. <input type="checkbox"/> Are other State and federal permits in the file?
Measure stake out distances from waterway or landmark. Is development in the right place? Is fill correct distance from waterway or landmark? <input type="checkbox"/> YES, check fill compaction and side slopes. <input type="checkbox"/> NO, take enforcement action to correct problems.
Elevation of lowest floor checked during framing or foundation inspection after lowest floor is in place. Elevations checked and acceptable? <input type="checkbox"/> YES, maintain copy of documentation of final elevations in permanent records. <input type="checkbox"/> NO, take enforcement action to correct problems.
Electrical, mechanical, plumbing, heating/air conditioning components elevated? <input type="checkbox"/> YES. <input type="checkbox"/> NO, take enforcement action to correct problems.
For enclosures below BFE (including crawl spaces), check that: <input type="checkbox"/> Flood damage resistant materials are used <input type="checkbox"/> Enclosure appears to be limited to crawl space, parking, building access, or limited storage <input type="checkbox"/> Flood openings no more than 12" above grade <input type="checkbox"/> Enough flood openings installed (based on net open area provided by the flood openings or certification of engineered openings) <input type="checkbox"/> Flood openings on at least two separate sides of the structure <input type="checkbox"/> Flood openings allow <i>automatic</i> entry/exit of floodwater (no human intervention needed) <input type="checkbox"/> Building does not have enclosures below BFE. <input type="checkbox"/> For any other unchecked items: take enforcement action to correct problems.
Other Notes Based on Inspection:

Final Inspection Completed By: _____ Date: _____

Permit # _____

Applicant: _____

FINAL APPROVALS

Flood Hazard Area Development

Ensure that the following information is in the file

All Applications:

- Approved floodplain development permit
- Elevation Certificate, marked "finished construction," reviewed for accuracy
- All other required local, state, and federal permits
- Approved Building Inspection checklist

Site Specific Documents:

- If engineered vents: engineer's certification verifying opening allowance

Dry Floodproofed non-residential structures:

- Floodproofing certificate completed by a registered engineer

Floodway:

- "No-rise" certificate completed by a registered engineer (or CLOMR if rise will occur)
 - LOMR to be submitted within 6 months of completion of construction if CLOMR required

Watercourse Alterations:

- Copies of notices to adjacent communities, federal agencies (e.g. CLOMR application), and the NFIP State Coordinator.
- Engineer's analysis showing how flood carrying capacity is maintained

Puget Sound watersheds:

- Habitat Assessment (as applicable per FEMA guidance)

- Issue Certificate of Occupancy