FLOOD ZONE REVIEW

For all permit applications, please attach the following flood review form. If the answers to the questions call for another flood form to be included, also add that form.

Flood Zone Initial Review

1. Is the most restrictive flood zone within the footprint of the proposed development A, AE, AO, or D? Use GIS (Public, Internal, Building), FEMA Flood Hazard Layer, or surveyor maps to make a determination.
   - ❒ Yes: Go to the next question #2.
   - ❒ No: Set the Flood Review to N/A with a note of "Not in SFHA". Review is complete.
2. Does the development encroach on a Floodway *or* a Flood Zone AE without a defined Regulatory Floodway? See maps of Cache Creek and Willow Slough.
   - ❒ Yes: Complete the "Floodway Encroachments" form *and* go to the next question.
   - ❒ No: Go to the next question #3.
3. Is the development an alteration to existing development?
   - ❒ Yes: Complete the "Substantial Improvement/Substantial Damage" form.
   - ❒ No: Go to the next question #4.
4. Is the development new construction, substantial improvement, or repair of substantial damage of: a structure with 2 or more rigid walls and a roof? a tank? a manufactured home?
   - ❒ Yes: Go to the next question #5.
   - ❒ No: See "Other Development" form.
5. Is the development an agricultural building, a 2-car private garage that is 600 square feet or smaller, or a small shed under $1500 in value?
   - ❒ Yes: Complete the "Ag or Accessory Structure in SFHA" form.
   - ❒ No: Go to the next question #6.
6. Is the development in flood zone D or A?
   - ❒ Yes: See "New Structures in SFHA" form and explain the requirements to the applicant. Complete a Flood Zone Determination Request and submit it to the floodplain manager. Do not accept the submittal without a completed elevation certificate unless the floodplain manager approves the submittal. The Base Flood Elevation must be determined. Determine if the location is covered by one of the three maps that we have for additional data: Clarksburg, Knights Landing, or FloodSAFE Yolo. Check for other Best Available Mapping. The applicant might need to hire an engineer to determine the BFE.
   - ❒ No: Do not accept the submittal without a completed elevation certificate unless the floodplain manager approves the submittal. See "New Structures in SFHA" form.

Floodway Encroachments

"Floodway" Definition

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "Regulatory Floodway."

The boundary of a Floodway is defined on the Flood Insurance Rate Map (FIRM)

"No-Rise" Requirement

Within an adopted regulatory floodway, the County of Yolo shall prohibit encroachments, including fill, new construction, substantial improvements, and other new development unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in the base flood elevation during the occurrence of the base flood discharge.

Floodways in Yolo County:

Cache Creek from Cache Creek Nature Preserve upstream to the of the town of Capay. This area runs parallel to and north of Highway 16, crosses I-505, and runs north of the towns of Esparto and Capay. Most of this area is covered by the Cache Creek Resource Management Plan (CCRMP). A significant portion is utilized for surfacing mining of sand and gravel. A long-range plan will turn these areas into a long park with pedestrian and bike paths through areas restored to a natural and beneficial function.

Willow Slough from County Road 101A to County Road 27. It crosses Highway 113, and County Roads 99 and 98. The area is mostly farmland, but there is some development at Myrtle Lane, Cedar Logs Dr, Bullard Lane, west and east of CR 99, and east of CR 101A.

Flood Zone AE without a Defined Floodway are areas frequently encountered throughout Yolo County. The floodplain administrator should be consulted for any new construction or other development with the potential to increase flood depths in these areas.

Until a regulatory floodway is adopted, no new construction, substantial development, or other development (including fill) shall be permitted within Zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the County of Yolo.

Work that has the potential to increase flood depth includes new structures, grading, and anything that might restrict the flow of water.

For more information visit https://www.fema.gov/glossary/no-rise-certification-floodways

Substantial Improvements Determination / Substantial Damage Determination

Project Address: _____

Project APN: _____

Project Description: _____

Construction Valuation: _____

Construction costs must be based on market value. Labor and material costs must be current market rates. Questionable valuations will require a copy of the signed contract, which will require a detailed list of all labor and material costs.

A Substantial Damage determination is based on the entire cost to repair the damage.

Some of the costs that may be excluded are clean-up and trash removal, plans and specifications, permit fees, landscaping, and detached accessory structures. Contact the Floodplain Administrator for more details.

Provide one of the following two values:

Assessed Value of Structure: _____

Include a copy of the assessor's statement of value. Assessed value must be for the individual structure being improved.

Actual Cash Value of Structure:

Include a copy of the appraisal showing the "Market Value" based on the Actual Cash Value. Appraisals must be completed by licensed and active third-party appraiser. Do not include value of land, location, detached structures or non-structural improvements such as fences, pools, or landscaping. Contact the Floodplain Administrator for more details.

Occupancy: _____

ISO Construction Class: _____

Area in Square Feet: _____

Cost per Square Foot: _____

Initial Value: _____ Area x Cost per Square Foot

Physical Depreciation: _____ Provide support for the depreciation percentage.

Actual Cash Value: _____

I understand that if the work is determined to be a substantial improvement, the entire existing structure must be made compliant with the requirements for new construction in the Yolo County Flood Protection ordinance. Substantial Improvement includes the repair of Substantial Damage.

I agree if this work is determined not to be substantial, the work will proceed without making the structure less protected from flooding than it currently is. All work that is not flood damage resistant materials or resistant to the entry and accumulation of flood waters will be at or above the current lowest floor elevation.

Owner Signature: _____ Date: _____

Email: _____ Phone: _____

For Substantial Improvement / Substantial Damage information see:
https://www.fema.gov/media-library/assets/documents/18562
www.crsresources.gov (Activity/ Element 432.d.)

Substantial Improvements Determination / Substantial Damage Determination

OFFICE USE ONLY:

Construction Valuation: **$_____**

Value of Structure: **$_____**

Percent Improvement: **_____%**

For all permit activities that were active in the past 12 months, list the prior permit numbers and valuations:

Date: _____ Permit: _____ Percent Improvement: _____%

Date: _____ Permit: _____ Percent Improvement: _____%

Date: _____ Permit: _____ Percent Improvement: _____%

Total Improvement: **_____%**

The proposed project is not a substantial improvement for the following reason:

- ❒ **The work is repair or minor alteration to a primary residence with a construction valuation of $20,000 or less**. The Floodplain Administrator has determined that there are no primary residences in Yolo County with an actual cash value lower than $50,000, so the project is 40% or less than of the actual cash value of the structure. Therefore, it is not a substantial improvement.
- ❒ The construction valuation of the structure is **40% or lower of the assessed value** of the structure.
- ❒ The construction valuation of the structure is **40% or lower) of the appraised value** of the structure.

If the above boxes are check, the permit technician shall:

- ❒ Create a Flood Review resulted to "Approved" with a note: "Flood Zone: Not a S.I."
- ❒ Stamp the construction documents "Flood Zone: Not a S.I."
- ❒ If assessor or appraisal data was referenced, attach it to the permit.

Date: _____ Staff Signature: _____

FLOODPLAIN ADMINISTRATOR USE ONLY

The proposed project is not a substantial improvement for the following reason:

- ❒ The construction valuation of the structure is _____% (50% or lower) of the appraised value of the structure.
  - o Attach the appraisal.
- ❒ While precise figures were not provided, based on readily available information, this project is well below the threshold for a substantial improvement.
  - o Max Construction Valuation: _____ (Rounded Up)
  - o Actual Cash Value of Structure: _____ (Rounded Down)
  - o Resultant Percentage: _____ % (must be 40% or less)

The proposed project IS A SUBSTANTIAL IMPROVEMENT for the following reason:

- ❒ The construction valuation is _____% (OVER 50%) of the appraised value of the structure. **The entire structure must meet the regulations for new construction in the Yolo County Flood Protection ordinance.**

Date: _____ Floodplain Administrator Signature: _____

Other Development

Definitions

Development

Development is defined as *any manmade change to improved or unimproved real estate*, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials. For the purposes of this chapter, the following activities shall not be considered development: plowing, seeding, cultivating, harvesting, field leveling outside defined watercourses, contouring, and planting, as well as routine maintenance of irrigation ditches.

Structure

A structure is defined as principally above ground with two or more rigid walls and a roof. This definition includes liquid storage tanks and manufactured homes.

Other Development

Development that is not a "structure" as defined above.

Requirements

- ❒ Drainage: must be demonstrated that it will not negatively impact drainage patterns or flood risk at any location.
- ❒ Anchoring: The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement.
- ❒ Equipment: Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the BFE.
- ❒ Materials: The portions of the accessory structure located below the BFE must be built using flood-resistant materials.

Subdivisions

See Sec. 8-4.503 Standards for Subdivisions at https://www.yolocounty.org/home/showdocument?id=50636

CA Building Code "Structures" that are not NFIP "Structures"

Structures that require a building permit, but that do not meet the NFIP definition of a "structure", shall meet the general requirements for "Other Development."

Storage

Storage of equipment or materials must not negatively impact flood risk at any location. Hazardous materials shall not be stored less than one foot above the base flood elevation. Storage in a flood zone requires a Flood Hazard Development Permit.

Grading

Grading must be approved by the Floodplain Administrator. Typical concerns are impacts to drainage patterns, increase flood risks, erosion control, slope stability, compaction, and use of approved soil. All grading in a flood zone requires a Grading Permit which will be reviewed by the Floodplain Administrator.

Accessory Structure or Agricultural Building in SFHA

For additional information see FEMA Policy #104-008-03:

https://www.fema.gov/sites/default/files/2020-08/fema_floodplain-management_agriculture-accessory-structures_2020.pdf

Accessory Structure:

A storage shed under $1500 in value or a 2-car garage not more than 600 square feet does not have to meet the lowest floor elevation requirement, but does have to meet all other applicable requirements for new construction, including:

- ❒ Use of the accessory structure must be limited to parking or limited storage
- ❒ The portions of the accessory structure located below the BFE must be built using flood-resistant materials
- ❒ The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement
- ❒ Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the BFE
- ❒ The accessory structure must comply with floodplain encroachment provisions in Section 8-4.506
- ❒ The accessory structure must be designed to allow for the automatic entry of flood waters in accordance with Section 8-4.501(c)(3).

Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 8-4.501.

Agricultural Building

An agricultural building must meet all of the requirements for new non-residential construction unless a variance application has been approved. While Yolo Builds has created an expedited variance process for agricultural buildings, the structure must meet all of the requirements for a variance and only the minimum necessary variance will be granted. See “Flood Variance.”

New Construction

Lowest Floor Elevation

New construction shall have the lowest floor, including basement, elevated as follows:

1. Structures in zones **A** or **AE** must have the lowest floor elevated at least one foot above the base flood elevation (BFE + 1.0). In flood zone A, the BFE must be determined by the applicant if the Floodplain Administrator does not have Best Available Mapping.
2. Structures in zone **AO** must have the lowest floor elevated above the Highest Adjacent Grade (HAG) by a height of at least one foot more than the flood depth specified on the FIRM (HAG + Depth + 1.0 ft). The Highest Adjacent Grade is defined as the highest natural grade prior to the start of construction.
3. *Non-residential* structures may be dry floodproofed: The building and attendant utilities are constructed so that the structure is watertight with walls substantially impermeable to the passage of water, with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, and the design and construction are certified by a registered civil engineer or architect.

Elevation Certificates

New construction shall have Elevation Certificates submitted three times:

1. With the building permit application,
2. As soon as the lowest floor elevation can be determined based on forms set-up or the subfloor framing, and prior to the framing of walls and/or higher floors of the structure.
3. After the structure is completed with all service equipment installed, but prior to final inspection.

Flood Vents

Crawlspaces and fully enclosed areas below the lowest floor that are subject to flooding shall only to be used for the parking of vehicles, building access, or storage. Such areas shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered civil engineer or architect, or meet or exceed the following criteria:

- ❒ A minimum of two openings on different sides having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding,
- ❒ The bottom of all opening shall be no higher than one-foot above grade,
- ❒ Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the *automatic* entry and exit of floodwater, and,
- ❒ Buildings with more than one enclosed area must have an opening on exterior walls for each area to allow flood water to directly enter.

Flood Damage Resistant Materials

Areas below the base flood elevation shall be constructed with flood damage-resistant materials and utility equipment. Service facilities (such as electrical, heating, ventilation, plumbing, and air conditioning equipment) shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

New Construction (Continued)

Anchoring

New construction shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

Drainage Paths

In zone AO, new construction shall be constructed so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

Attached Garages

Attached garages must either be elevated or vented. Non-residential garages may be dry floodproofed.

Detached Garages

See “Accessory Structures.”

Flood Variance

VARIANCES: A variance, which may result in *very high insurance rates*, may be considered upon written application for certain structures including the following:

- Agricultural buildings,
- Historic structures,
- Infill projects located on a lot ½ acre or less, or
- Other extraordinary projects as determined by the Floodplain Administrator.

To apply for a variance, see the following:

Yolo County Floodplain Development Variance Application Packet

Article 6 of the Flood Protection Ordinance

LOMC: Letter of Map Change

Publishing a Flood Insurance Rate Map (FIRM) is a major undertaking for both FEMA and Yolo County. When maps need small changes, they are handled through a letter that changes the effective FIRM. There are several kinds of letter described below.

Letter of Map Amendement (LOMA)

A LOMA may correct an error on the FIRM or reference improved data to refine existing floodplain boundaries.

Letter of Map Revision (LOMR)

A LOMR is typically used to document a change to the floodplain, often cause by development, flood prevention projects, or other major changes that may increase the Base Flood Elevation in some locations. The burden of documentation on a LOMR is much higher than that for a LOMA, with a corresponding increase in time required for review by FEMA.

Letter of Map Revision Based on Fill (LOMR-F)

A LOMR-F is typically used to document the construction of an elevated building pad. The increased ground elevation can change the flood zone of a portion of land from Zone A, AE, or AO to Flood Zone X.

Conditional Letters: CLOMA, CLOMR, CLOMR-F

A LOMA, LOMR, or LOMR-F can only be based on completed projects. To obtain approval from FEMA to start work on a project, it may be required to obtain a Conditional Letter stating that a project constructed as submitted would be approved for a LOMA, LOMR, or LOMR-F once construction is completed. A Conditional Letter does alter the effective FIRM, and only indicates to the applicant that FEMA has acknowledged starting the proposed work is consistent with the requirements of the NFIP.

Examples:

1. A homeowner plans to construct a single-family dwelling on an elevated pad, prior to starting work they may optionally request a CLOMR-F to ensure that FEMA would recognize the fill as providing adequate elevation. Upon completion of the construction, they could optionally request a LOMR-F to document the completion of the project, change their flood zone designation, and alter their insurance requirements.
2. A regional flood control agency plans to construct a waterway to divert flood water away from existing developed areas. A CLOMR is required to show that the proposed project would mitigate any negative impacts from diverting water into the new waterway. After the project is completed, a LOMR is required to establish the changed floodplain on the Flood Insurance Rate Maps. For very extensive changes, FEMA may decide to publish new maps.

These descriptions are summaries. For the full requirements of each of these documents, see FEMA's website.