

Highlighted text requires choice/modification

D. Erosion: (River Corridor Overlay (RCO) District)/River Corridors)

I. Statement of Purpose for Managing River Corridors

- A. Protection of the river corridor provides rivers and streams with the lateral space necessary to maintain or reestablish floodplain access and minimize erosion hazards through natural, physical processes. It is the intent of this bylaw to allow for wise use of property within river corridors that minimizes potential damage to existing structures and development from flood-related erosion, to discourage encroachments in undeveloped river corridors and to reasonably promote and encourage infill and redevelopment of **designated centers** that are within river corridors.

II. (RCO District/River Corridor) General Provisions

- A. **Establishment of (RCO Districts/River Corridors)**
Towns with zoning choose: The RCO is an overlay district. All other requirements of the underlying district or another overlay district such as the Flood Hazard Overlay District, shall apply in addition to the provisions herein, unless it is otherwise so indicated. If there is a conflict with another such district, the stricter provision shall apply.

Towns w/o zoning choose: Where River Corridors and Flood Hazard Areas overlap, all other requirements of the Flood Hazard Area shall apply in addition to the provisions herein, unless it is otherwise so indicated. If there is a conflict with the River Corridor, the stricter provision shall apply.

- B. **(RCO District/River Corridor) Boundaries**
1. Article D of this bylaw shall apply to the Statewide River Corridors in the **Town/City/Village of _____**, Vermont, as published by the Agency of Natural Resources(ANR)¹ including refinements to that data based on field-based assessments which are hereby adopted by reference. This includes the river corridor small streams setback measured as 50 feet from top of the stream bank or slope for streams draining watersheds between 0.5 and 2 square miles.
 2. Requests to update a river corridor map shall be in accordance with the procedure laid out in the ANR *Flood Hazard Area and River Corridor Protection Procedure*².

¹ Statewide River Corridors are published on the ANR Natural Resources Atlas under the *Rivers* layer grouping: <http://anrmaps.vermont.gov/websites/anra5/>

² http://dec.vermont.gov/sites/dec/files/documents/DEC_FHARCP_Procedure.pdf

C. Jurisdictional Determination and Interpretation

The information presented on any maps, or contained in any studies, adopted by reference, is presumed accurate. If uncertainty exists with respect to the boundaries of the **RCO/River Corridor**, the location of the boundary on the property shall be determined by the Administrative Officer (AO). If the applicant disagrees with the determination made by the AO or the river corridor as mapped, the applicant has the option to either:

1. Hire a licensed land surveyor or registered professional engineer to stake out the **RCO/River Corridor** boundary on the property; or
2. Request a letter of determination from ANR which shall constitute proof of the location of the river corridor boundary.³ When ANR receives a request for a letter of determination, ANR evaluates the site and existing data to see if a change to the river corridor delineation is justified, necessitating a river corridor map update⁴. An ANR letter of determination will either confirm the existing river corridor delineation or will result in an update to the river corridor delineation for the area in question. If a map update is justified, an updated map will be provided with the letter of determination.

III. Development Review in River Corridors

A. Exempted Activities

The following activities do not require a permit under this section of the bylaw

1. The removal of a building or other improvement in whole or in part, so long as the ground elevations under and adjacent to the removed structure remain unchanged.
2. Any changes, maintenance, repairs, or renovations to a structure that will not result in a change to the footprint of the structure or a change in use.
3. Maintenance of existing sidewalks, roads, parking areas, or stormwater drainage; this does not include expansions.
4. Maintenance of existing bridges, culverts, and channel stabilization activities; this does not include expansions.
5. Construction or repair of stream crossing structures (bridges and culverts), associated transportation and utility networks⁵, dams, dry hydrants, and other functionally dependent uses that must be placed in or over rivers and streams that are not located in a flood hazard area and that have coverage under a Stream Alteration Permit, if required, under 10 V.S.A. Chapter 41 and the rules adopted thereunder.
6. Activities exempt from municipal regulation and requiring a permit under the State's "Vermont Flood Hazard Area and River Corridor Rule" (Environmental Protection Rule, Chapter 29)⁶:
 - a. State-owned and operated institutions and facilities.

³ In support of a letter of determination request, applicants must provide a description of the physical characteristics that bring the river corridor delineation into question (e.g. the presence of bedrock or other features that may confine lateral river channel adjustment).

⁴ River Corridor map updates are further explained in the Flood Hazard Area & River Corridor Protection Procedure: http://dec.vermont.gov/sites/dec/files/documents/DEC_FHARCP_Procedure.pdf

⁵ New transportation or utility development that runs parallel to the river is not exempt and shall meet the Development Standards in Section IV.

⁶ State-owned and -operated institutions and facilities, Forestry, Required Agricultural Practices, and Public Utility Commission jurisdictional facilities located in a Flood Hazard Area or River Corridor are regulated under the State Flood Hazard Area & River Corridor Rule, 10 V.S.A. § 754.

- b. Forestry operations or silvicultural (forestry) activities conducted in accordance with the Vermont Department of Forests and Parks Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont or other accepted silvicultural practices, as defined by the Commissioner of Forests, Parks and Recreation.
- c. Agricultural activities conducted in accordance with the Vermont Agency of Agriculture, Food and Market's Required Agricultural Practices (RAPs). Prior to the construction of farm structures, the farmer shall notify the AO in writing of the proposed activity. The notice shall contain a sketch of the proposed structure including setbacks.
- d. Public utility power generating plants and transmission facilities regulated under 30 V.S.A. § 248.
- e. Telecommunications facilities regulated under 30 V.S.A. § 248a.
- 7. Planting projects which do not include any construction or grading activities in accordance with 24 V.S.A. § 4424(c).
- 8. Subdivision of land that does not involve or authorize development.

B. Permits

Except as provided in Section D.III.A [Exempted Activities], a permit is required from the AO for all development that is located within the River Corridor. Development that requires conditional use approval or a variance from the **Zoning Board of Adjustment (ZBA)/Development Review Board (DRB)** under this bylaw must have such approvals prior to the issuance of a permit by the AO. Any development that is also subject to municipal jurisdiction in the designated flood hazard areas shall meet the criteria in **Section E (or other section where flood hazard area standards are located)**.

- 1. All permits shall require that a permittee have all other necessary permits from state and federal agencies before work may begin.

C. Prohibited Development in the (RCO District/River Corridor)

The following are prohibited in the **RCO District/River Corridor**:

- 1. New structures, fill, development, and accessory dwellings⁷ that do not meet the standards in Section D.IV [Development Standards];
- 2. Any other development that is not exempt, permitted, or listed as a conditional use which would cause or contribute to fluvial erosion hazards.

D. Administrative Review; Permitted Development

The following development activities in the **RCO District/River Corridor** meeting the Development Standards in Section D.IV, require an administrative review from the AO and may receive a permit from the AO without review by the **ZBA/DRB**:

- 1. Small accessory structures not larger than 500 square feet.

⁷ Depending on community settlement patterns, and to ease bylaw administration, some communities may consider simply prohibiting new structures within the river corridor (as opposed to allowing infill and redevelopment).

2. Improvements to existing utilities that are along an existing right of way and serve a building.
3. Replacement on-site septic systems.
4. An attached deck or patio to an existing structure that is 200 square feet or less and is located no less than 100 feet from the top of bank.⁸
5. River or floodplain restoration projects that do not involve fill, structures, utilities, or other improvements, and which have written confirmation from the ANR Regional Floodplain Manager that the project is designed to meet or exceed the applicable standards in this bylaw.⁹

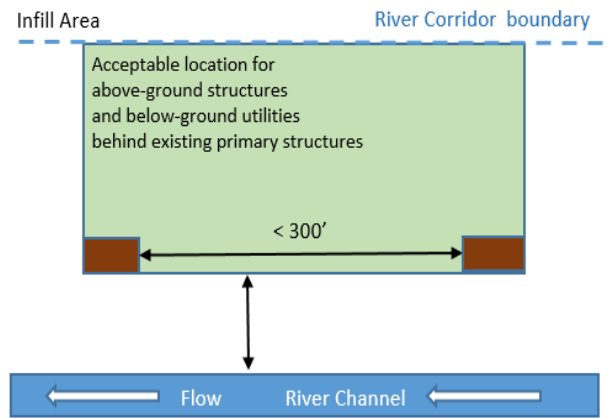


Figure 1: In-fill Development Standard

E. Conditional Use Review

In accordance with 24 V.S.A. § 4414, conditional use review and approval by the ZBA/DRB is required prior to the issuance of a permit by the AO for any activity¹⁰ in the RCO District/River Corridor that is not exempt or eligible for administrative review.

IV. Development Standards

The criteria below are the minimum standards for development in the (RCO District/River Corridor). Where more than one district is involved, the most restrictive standard shall take precedence.

- A. Development within designated centers shall be allowed within the river corridor if the applicant can demonstrate that the proposed development will not be any closer to the river than pre-existing adjacent development.
- B. Development outside of designated centers shall meet the following criteria:
 1. In-Fill Between Existing Development: Development must be located no closer to the channel than the adjacent existing primary structures, within a gap that is no more than 300 feet (see Figure 1), or

⁸ An attached deck or patio does not include enclosed or three-season porches.

⁹ Applicants should be made aware that any restoration project involving work within the stream channel may require a Stream Alteration Permit under 10 V.S.A. Chapter 41 and the rules adopted thereunder.

¹⁰ This includes public water accesses and unimproved paths that provide access to the water for the general public and promote the public trust uses of the water. Permits for such accesses and paths must include a condition prohibiting the permittee from actively managing the section of river to solely protect the public water access from lateral river channel adjustment.

If there are pre-existing investments such as infrastructure or habitable structures in close proximity to the access, it may be appropriate to provide streambank armoring in compliance with the Vermont Stream Alteration Rules; <http://dec.vermont.gov/watershed/rivers/river-management#rules>

2. Down River Shadow: An addition to an existing habitable structure, or an accessory structure that is adjacent to an existing structure, shall be located in the shadow area directly behind and further from the channel than the existing structure, or within 50 feet to the downstream side and no closer to the top of bank. Below-ground utilities may also be placed within the same shadow dimensions of an existing below-ground system (see Figure 2).

C. River Corridor Performance Standard¹¹

1. Proposals that do not meet the infill or shadowing criteria in section D.IV [Development Standards] A or B must demonstrate and the ZBA/DRB must find that the proposed development will:

- a. not be placed on land with a history of fluvial erosion damage or be imminently threatened by fluvial erosion;
- b. not cause the river reach to depart from or further depart from the channel width, depth, meander pattern, and slope associated with natural stream processes and equilibrium conditions; and
- c. not result in an immediate need or anticipated future need for stream channelization solely as a result of the proposed development, that would increase flood elevations and velocities or alter the sediment regime triggering channel adjustments and erosion in adjacent and downstream locations.

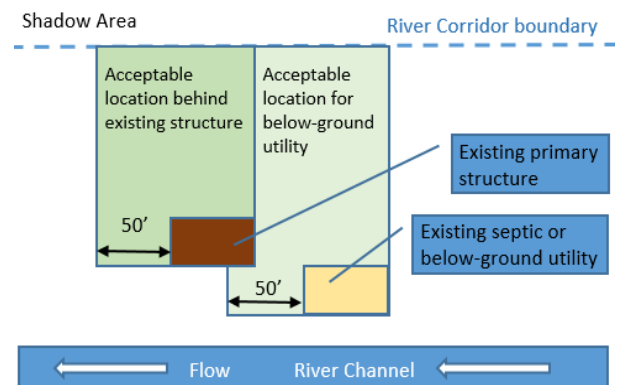


Figure 2: Shadow Area Development Standard

2. Proposals that meet the infill or shadowing criteria in section D.IV.[Development Standards] A or B, are presumed to meet the River Corridor Performance Standard. However, The ZBA/DRB has the option to require an applicant to demonstrate that a proposal meets the River Corridor Performance Standard if there is a concern that the proposed development is at particular risk from fluvial erosion or may increase fluvial erosion, based on location or past flood damage.
3. The ZBA/DRB may request or consider additional information to determine if the proposal meets the River Corridor Performance Standard, including:
 - a. a description of why the shadowing and infill criteria in D.IV.A or B cannot be met;

¹¹ Depending on community settlement patterns and development plans, some communities may consider removing the river corridor performance standard to create a more restrictive bylaw that is easier to administer.

- b. data and analysis from a consultant qualified in the evaluation of river dynamics and erosion hazards;
- c. Comments provided by the DEC Regional Floodplain Manager on whether the proposal meets the River Corridor Performance Standard.

V. Permit Conditions

Permits for public water accesses and unimproved paths that provide access to the water for the general public and promote the public trust uses of the water shall include a condition prohibiting the permittee from actively managing the section of river to solely protect the public water access from lateral river channel adjustment.