

CRS UNIFORM MINIMUM CREDIT INDIANA

SUMMARY

The Community Rating System (CRS) provides Uniform Minimum Credit (UMC) for certain state laws, regulations, and standards that support floodplain management and have proven effective in reducing flood damage.

The following table summarizes UMC credit available to all communities. It also includes possible additional credit available for selected areas or state activities and creditable state model ordinance provisions. The Insurance Services Office (ISO)/CRS Specialist and the community need to determine which possible additional credits apply to their area. These UMCs do not necessarily apply to Tribal Nations.

The range of credit available to communities within the state is shown below, followed by an explanation of each activity. The credit is based on the 2013 *CRS Coordinator's Manual*.

Activity	Element		Credit	
Uniform Minimum Credit				
410	New Study (NS)		0 - 105	
410	Floodway Standard (FWS)		0 - 90	
430	Freeboard (FRB)		16.9 - 169	
430	Other Higher Standards (OHS)		5	
430	State-mandated Standards (SMS)		17.4 - 20	
450	Erosion and Sediment Control (ESC)		10	
	1	Total	49.3 - 399	
Possible Additional Credit				
450	Water Quality (WQ)		20	
410	Cooperating Technical Partner (CTP1)		10	
630	State Dam Safety		0 - 21	
	7	Total	30 - 51	
Model Ordinance Provisions				
430	Foundation Protection (FDN)		35	
430	Cumulative Substantial Improvement (CSI)		20 - 60	
430	Development Limitations (DL1)		130	
	1	Total	185 - 225	

Credit for activities in the 400 series can increase based on the Community Growth Adjustment. The CRS requires participating communities to maintain elevation certificates, which provide an additional 38 points. Five hundred points are needed for Class 9.



UNIFORM MINIMUM CREDIT

Activity 410. Floodplain Mapping

New Study (NS) – Up to 105 points are awarded to communities for the state requirement that flood elevations and a floodway be determined at the time of development, for all sites within an Approximate A zone. The delineations must be done using standard engineering techniques acceptable to the state. Credit is not applied if the community has no Approximate A Zone designations in its floodplain.

Legal basis: The Indiana Administrative Code (IAC), Article 10, Rule 3 at www.in.gov/legislative/iac/T03120/A00100.PDF requires delineation of floodplains and floodways, including elevations, in the absence of a FEMA designation (312 IAC 10-3-3 (b) and (d)). Indiana Code (IC) 14-28-1-22 at www.in.gov/legislative/ic/code/title14/ar28/ch1.html requires a permit from the state before beginning construction on projects in the floodway.

Verification: ISO/CRS Specialists will review permits, site plans, elevation certificates, and similar documents for those developments in the Approximate A zone. The technical reviewer will verify credit by reviewing flood insurance studies, ordinance provisions, impact adjustment maps, and area calculations provided by the communities.

Annual UMC verification: The technical reviewer will verify that the regulations are still in effect, and review the calculations.

State Review (SR) - Up to 30 points are awarded for the state requirement that flood studies for the purpose of determining BFEs and floodway designations, are subject to an independent quality assurance review and approval by the Indiana Department of Natural Resources. Indiana has been approved for state review credits and these credits are different for coastal and riverine studies; therefore the table below should be used when determining what percentage of the state review credits a community receives. The study must be based on a Federal Emergency Management Agency (FEMA) approved technique, or specifically approved by the FEMA Regional Office. ISO/CRS Specialists must document that the technique used is a detailed method or approved by the Region.

Activity 410 - New Studies (NS) QA/QC Reviews	State Review
Hydrologic analyses	X
Hydraulic analyses	X
Floodplain mapping	Х
Independent Review Value (riverine studies)	1.00
Independent Review Value (coastal studies)	0.67
Earliest reviews	1982



Floodway Standard (FWS) – Up to 90 points are awarded for use of Indiana's more restrictive floodway standard of less than 0.15 foot allowable surcharge to delineate the floodway. This only applies to floodplains where floodways are determined, so an impact adjustment is needed if the optional minimum credit is not used. Furthermore, if a community has no floodways designated in its floodplain, FWS = 0.

Legal basis: Section 312 of the IAC, Article 10 (312 IAC 10-2-3) establishes the floodway standard for the delineation and regulation of all flood hazard areas. www.in.gov/legislative/iac/T03120/A00100.PDF.

Verification: The technical reviewer will verify credit by reviewing flood insurance studies, ordinance provisions, impact adjustment maps, and area calculations provided by the communities.

Annual UMC verification: ISO/CRS Specialists will verify that the regulations are still in effect.

Activity 430. Higher Regulatory Standards

Freeboard (FRB) - From 16.9 to 169 points are awarded for requiring the lowest level of a building with a floor area greater than 400 square feet to be at or higher than the flood protection grade, two feet above the regulatory flood. For a building other than an abode, the building and utility and sanitary facilities are to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting flood forces. Credit is reduced by 25 percent if ductwork and equipment are not included in this regulatory requirement at the community level.

Legal basis: The flood protection grade is defined in 312 IAC 10-2-23. The freeboard requirement is contained in 312 IAC 10-3-5 at www.in.gov/legislative/iac/T03120/A00100.PDF

Verification: ISO/CRS Specialists will review elevation certificates, permits, site plans, and similar documents for new developments in the regulatory floodplain.

Annual UMC Verification: ISO/CRS Specialists will verify that the regulation is still in effect.

Other Higher Standards (OHS) - 5 points are awarded for the Indiana law which prohibits new septic systems for residences in any SFHA.

Legal basis: This requirement is contained in 41- IAC 6-81-48, part G at http://www.in.gov/legislative/iac/T04100/A00060.PDF.



Verification: The ISO/CRS Specialist will verify credit by reviewing permits and ensuring the community enforces the regulation. Technical reviewer will verify credit by reviewing the regulatory ordinance provision.

Annual UMC Verification: ISO/CRS Specialists will verify that the regulations are still in effect.

State-mandated Standards (SMS) – From 17.4 to 20 points are awarded for state-mandated regulatory standards. Credit equals 0.10 times the sum of credit points for floodplain management regulatory standards. Total SMS is limited to 20 points.

State-mandated Standards				
Activity	Element	Credit		
410	New Study (NS)	0 - 105		
410	Floodway Standard (FWS)	0 - 90		
430	Freeboard (FRB)	169		
430	Natural and Beneficial Regulations (NBR)	5		
	Total	174 - 369		
	x 0.1	17.4 - 20		

Source: Section 432.n of the CRS Coordinator's Manual.

Activity 450. Stormwater Management

Erosion & Sedimentation Control (ESC) – 10 points are awarded for the National Pollution Discharge Elimination System (NPDES) General Permit Rule requiring erosion and sediment controls for construction sites one acre or larger. These requirements do not apply to agricultural land disturbing activities. The rules include:

- Sec. 2. (a) The requirements under this rule apply to all persons who: (1) do not obtain an individual NPDES permit under 327 IAC 15-2-6; (2) meet the general permit rule applicability requirements under 327 IAC 15-2-3; and (3) are involved in construction activity, except operations that result in the land disturbance of less than one (1) acre of total land area as determined under subsection (h) and are not part of a larger common plan of development or sale (327 IAC 15-5-2-a-3).
- (2) Ensure that a sufficient construction plan is completed and submitted in accordance with Section 6 of this rule (327 IAC 15-5-2-d-2). The construction plans must include the following: (7) A storm water pollution prevention plan associated with construction activities. The plan must be designed to, at least, meet the requirements of sections 7 and 7.5 of this rule and must include the following: (A) Location, dimensions, detailed specifications, and construction details of all temporary and permanent storm water quality measures.(B) Temporary stabilization plans and sequence of implementation. (327 IAC 15-5-6.5-7(A & B) (Section 6).



Legal basis: NPDES General Permit Rule, Indiana Administrative Code IAC Article 15, Rule 5 (327 IAC 15-5-7) and 327 IAC 15-5-2, Sec. 2 (b)(1) at http://www.ai.org/legislative/iac/T03270/A00150.PDF.

Verification: ISO/CRS Specialists will review permits and erosion control plans, and conduct field verification.

Annual UMC Verification: ISO/CRS Specialists will verify that the regulations remain in effect.



POSSIBLE ADDITIONAL CREDIT

Some state standards are eligible for CRS credit, but may not be in effect in every community. These standards are addressed below. ISO/CRS Specialists and the communities need to determine whether they are creditable in their area.

Activity 410. Floodplain Mapping

Cooperating Technical Partner 1 (CTP1) – 10 points are awarded for the CTP agreement between the state and FEMA. This is verified independently by the CTP technical reviewer and the results are distributed annually.

Activity 630. Dams

State Dam Safety (SDS) - Up to 21 points of credit for State Dam Safety Program activities based on the Dam Safety Program Management Tool. 15 points awarded for Condition Assessment and 6 points for Risk Communication and Public Awareness.

Verification: ISO/CRS Specialists will verify that the community is in compliance with the State Dam Safety Program. SDS credit is limited to communities that would be affected by a flood from the failure of a high-hazard-potential dam. This must be documented with a description and a map.

Annual UMC verification: The Federal Emergency Management Agency's Dam Safety Office annually verifies SDS credit.



MODEL ORDINANCE

The state has developed a model floodplain management ordinance for communities to consider. This model ordinance includes provisions that may provide more protection from flooding in communities that adopt them. Some of these provisions are eligible for CRS credit. The Model Ordinance is at

http://www.in.gov/dnr/water/files/IndianaModelOrdinance.pdf.

Activity 430. Higher Regulatory Standards

Foundation Protection (FDN) – 35 points may be available for FDN for adoption of the requirement that a residential or nonresidential structure must be constructed on a permanent land fill in accordance with the following:

- a). The fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with the either the Standard or Modified Proctor Test method.
- b). The fill should extend at least ten feet beyond the foundation of the structure before sloping below the FPG.
- c). The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulkheading.

Legal basis: Article 5, Section B.5.(a., b., c.).

Verification: ISO/CRS Specialists will review the local ordinance, development plans, and permit records in the regulatory floodplain. An impact adjustment may be applicable.

Annual UMC verification: ISO/CRS Specialists will verify that the model ordinance provisions remain in effect.

Cumulative Substantial Improvement (CSI) - From 20 to 60 points may be available for adoption of the provision for Cumulative Substantial Improvement, defining addition or improvement made to any existing structure to include:

- (i) where the cost of the addition or improvement equals or exceeds 50% of the value of the existing structure (excluding the value of the land);
- (ii) with a previous addition or improvement constructed since the community's first floodplain ordinance.

40 points are available for having substantial improvement tracked since the adoption of the ordinance and 20 points for having the proper ICC language in the ordinance.



Legal basis: Article 2 (ICC, Rep Loss and Substantial Improvement definitions); Article 3, Section J (ICC language); Article 5, Section B.(1.)(6.).

Verification: ISO/CRS Specialists will verify credit by reviewing the local ordinance and permit records for building improvements or repairs in the regulatory floodplain, including permit tracking methods.

Annual UMC verification: ISO/CRS Specialists will verify that the model ordinance provisions remain in effect.

Development Limitations (DL1) – 130 points are available for the requirement that, whenever any portion of the SFHA is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the BFE shall be compensated for and balanced by an equivalent volume of excavation taken below the BFE. The excavation volume shall be at least equal to the volume of storage lost (replacement ratio of 1 to 1) due to the fill or structure.

Legal basis: Article 5, Section A (11).

Verification: ISO/CRS Technical Reviewer will review the ordinance provision, permits, site plans, and compensatory storage plans for new developments in the regulatory floodplain.

Annual UMC verification: ISO/CRS Specialists will verify that the model ordinance provisions remain in effect.

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