



Village of Schoharie
Long Term Community
Recovery Strategy
Final September 2014

Part 2

(Appendix 2 Community Rating System Readiness)



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Joining the National Flood Insurance Program's Community Rating System

Prepared for the Village of Schoharie, New York



ATKINS

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1. Introduction

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) was created to recognize, encourage, and reward through the use of insurance premium discounts those communities that go beyond the minimum required by the NFIP.

2. Benefits

Participation in the CRS program can benefit all properties in the village of Schoharie. Based on the Rating Class achieved, those properties carrying flood insurance and located in the Special Flood Hazard Area (SFHA) could see flood insurance premium discounts of 5 to 45%. In addition, even those village properties found outside of the SFHA would see a reduction of flood insurance costs of 5 to 10%.

Perhaps more important than insurance premium discounts, would be the direct benefit that every citizen and property owner in the village would enjoy from the activities, behaviors, and actions required of the CRS. For example, through its efforts in revising its local ordinances, the village may receive credit for ensuring that its building code protects ALL homes from local drainage problems, not just those shown in the SFHA. Or that the village is prepared for the possibility of a catastrophic dam breach whose floodwaters would extend well beyond the SFHA shown on the village's Flood Insurance Rate Map (FIRM).

Most importantly, participation in the CRS sets the village up for future flood resilience. One study in Texas found that in one watershed in the Houston area, of the 12 of 22 communities in the watershed participating in the CRS, the average claim amount for those communities in the program was reduced by 88% in the total dollars paid out for each claim! In addition, flooding and floodplains are not static, both change over time. Because the long range forecast for the northeast United States indicates that over the next few decades there will likely be a marked increase in the severity and number of "extreme" precipitation events, the decisions and choices made today will have an impact on the village's residents and properties for years to come.

Lastly, like the weather, homeownership is constantly changing: Today's baby-boomer paid-off home is tomorrow's Generation X's first purchase. With a new mortgage comes a new need for flood insurance for those properties in the SFHA. The CRS helps a community plan, prepare, and mitigate the costs of homeownership in a community by making the required flood insurance more affordable; thus making a CRS-Schoharie a more attractive and competitive community for those seeking to buy.

3. Goals

Every community in the CRS has the opportunity to strive for the best rating possible within the technical, monetary, and societal realities (i.e., willingness for new regulation; disruption/change to long-established behaviors; etc.) of the jurisdiction and its citizens. The population or geographic size of the community is not as important to a successful CRS program as is the commitment of elected and appointed officials of the community to the effort. CRS communities in the Northeast range in population from as small as 300 to over 1million residents and from Rating Class 10 (in CRS, but receiving no discount) to 5 (25% discount).

The CRS program is designed to be flexible to the needs and abilities of the community and a community's goals can be achieved over a period of years, if needed, required, or desired. Therefore, as the village becomes more comfortable with the program, it may wish to be more aggressive or comprehensive in its CRS planning.

4. Prerequisites

The CRS has defined several prerequisites, based on desired Class Rating, which every community seeking admission to the CRS *must* meet to be considered for inclusion in the program. It is presumed at this time that the village will seek a CRS Class of between 9 and 7. The village's status in regard to these requirements is noted below.

Participating Member of the NFIP for at least one year:

A review of FEMA's Community Information System indicates that the village has been a member of the NFIP since 1975 and has never been suspended from the program. No further action is required.

The Community must be in full compliance with the minimum requirements of the NFIP:

A Community Assistance Visit (CAV) must be conducted by FEMA or the New York State Department of Environmental Conservation (NYSDEC) to determine if the village has met and is in compliance with NFIP regulations. Further information on preparing for the CAV follows in Section 6 - Community Assistance Visit.

Elevation Certificates:

The village must require, review, and maintain elevation certificates (ECs) for all properties (new and substantially improved) in the SFHA beginning, at a minimum, from the date of application to CRS. However, this action should begin immediately. (More information on training and the preparation of elevation certificates is provided in Section 5 - Elevation Certificates.)

Repetitive Loss Properties Plan:

Because the village has more than ten recorded repetitive loss (RL or rep loss) properties, the village must verify the addresses of, map, explain the cause of losses, provide specific outreach to those properties, and

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prepare a plan for addressing the repetitive loss problem in the village in a Repetitive Loss Analysis Plan (RLAA). The requirements for documenting RL in a community are found in Section 502 in the *CRS Coordinator's Manual*. An outline of preparing an RLAA can be found in Section 8 - Repetitive Loss.

Flood Insurance Policies for Municipally-Owned Properties:

Schoharie must determine if properties owned by the village are fully and adequately insured. The NFIP requires that publicly-owned structures and facilities be insured so that "all community-owned buildings exposed to flooding are insured for flood damage." This means that community buildings must carry the full coverage available for the type/value of the structure; not simply the minimum coverage to comply with the NFIP. Under-insured buildings will see "disaster assistance for a community owned building...reduced by the amount of NFIP flood insurance coverage (structure and contents) the community *should* be carrying on the building, regardless of whether the community is actually carrying a policy". A review of the village's coverage of properties can be found in Section 5 - Insurance of Village-Owned Properties in SFHA.

Coastal Considerations:

The village's inland location precludes this prerequisite. No further action is required.

5. First Steps Prior to Application

All requirements must meet the current *CRS Coordinators Manual's* guidelines. The effective *Manual* is dated 2013. Future changes to the requirements described in the *Manual* will not affect the village's CRS efforts until the next scheduled "cycle verification visit" by the ISO/CRS Specialist. For a community such as the village of Schoharie, this would generally be approximately five years following entry into the CRS program. ISO works on behalf of the NFIP to administer the CRS program.

As noted in the Prerequisites portion of this document, several conditions must be met in order to apply to the CRS program. This section describes the practical steps that the village should take before applying to the CRS.

Community Quick Check

The *Community Quick Check* is an exercise that a community must prepare and forward to FEMA (along with a letter of interest from the village's mayor (see attachments)) to assess a community's possible CRS classification. To begin the process, the village must determine if, at the present time, or with limited action, it is sufficiently prepared to earn at least 500 points to gain a minimum CRS Class Rating of 9.

The activities listed on the *Quick Check* are not exhaustive, but rather are noted as an overview of the most common activities undertaken by communities nationwide. A comprehensive review of all activities that the village may wish to undertake is covered in greater detail in Section 11 - Activities, and may be found in table form in the attachments *CRS Activity Cheat Sheet* and *CRS Activities Rankings*.

It is important to note that the *Quick Check* can only be used as a guide and the ISO/CRS Specialist will make the final determination of activity points. However, a copy of the *Quick Check* was provided to Ms. Nan Stolzenburg of Community Planning & Environmental Associates who found that based on the

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current activities, regulations, and requirements of the village and using a conservative estimate, it was calculated that the village could apply to the CRS program with approximately 1300 points and expect a Class 8.

A digital copy of the *Community Quick Check* can be found in the attachments. The *Quick Check* template can also be found on FEMA's website at fema.gov/media-library/assets/documents/31255?id=7078.

Review of Village's Flood Damage Prevention Law (Local Law 1 of 2004)

A review of the village's flood statute found only minor issues.

It is recommended that the law be amended to increase the lowest floor elevation from the currently required two feet to three feet above the 1-percent-annual chance flood (BFE) elevation.

The county's Flood Insurance Study (FIS) and FIRM Index have been updated since the village's law went into effect in 2004. While the changes made in the FIS since the 2004 revision to the Schoharie County FIRM do not affect the village, should the local law be revised for any reason, the date of the new FIS and FIRM Index (February 16, 2012) should be updated in the statute.

Lastly, Section 5.5(1)(iii) seems to reference a non-existent paragraph: "5.5(5)".

Review of Village's Land Use Law

The village's Land Use Law finds that in many ways, it is well suited to be part of a CRS program. The overall focus of the law, to preserve the rural and "small town" feel of the community, and its particularly strong emphasis on proper land use, as noted in Section 1-5, places the village in a good position to succeed within the requirements of CRS with generally only slight amending of the law and other administrative codes.

Prior to joining the CRS, a comprehensive review of the village's Land Use Law, conducted by a planning professional, should be initiated to bring it in to line, to the extent desired (as noted below) and practical, to meet CRS requirements. While the following comments regarding the village's Land Use Law may be addressed in other village regulation or documents, they are noted here for consideration.

In order to maximize the available points found in activities such as Stormwater Management Regulations (452a - SMR), the minimum "dwelling unit per square foot" should be increased to at least five acres (217,800 sf), or preferably 10 acres (435,600 sf), where possible for those properties within the SFHA and zoned as "agricultural" within the village.

Section 2-4 should be updated to note the current date of the FIRM and FIS for the village and revise the wording that adopts future FIRM revisions to acknowledge that Schoharie's FIRM is now part of a "countywide" set of FIRM panels.

Section 2-7.3 should be strengthened to be more specific to the requirements of freeboard, elevating utilities above the BFE, and other components of NFIP/CRS.

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Sections 2.7.6(E) and 11-3.1 should emphasize that buildings located in the SFHA and damaged beyond the NFIP minimum of 50% value of the structure (or lower, if enacted by the village (Lower Substantial Improvements, 432e - LSI)) must be rebuilt in accordance with NFIP requirements.

While Section R405.1 of the New York State Building Code begins to address the problems of foundation drainage, its emphasis appears to be focused on protecting the integrity of the foundation itself, rather than the contents or utilities of the building. Therefore, it is recommended that Chapter 5 be enhanced to require that site plans for new or improved development incorporate positive drainage requirements that will discourage flood water from even approaching a newly built structure or portion of structure.

Section 5-3.4(C) begins to address the needs of Stormwater Management Regulations (452a – SMR), but further research will need to be conducted to determine if other requirements of this activity are being met by the village's codes.

It should be noted that some of the activities permissible in conservation easement areas, such as community septic systems, under the village's Flexible Conservation Subdivisions Standards (Section 6-9.2), may not be compatible or counter to the requirements of Other Higher Standards (432m - OHS).

As explained in Section 3-2.2(E), using the Required Notice to Landowners disclosure as a template, the village may wish to require a similar notice for those properties located in the SFHA (Disclosure of the Flood Hazard (342a – DFH)).

Pursuant to the requirements of Enclosure Limits (432g – ENL) and Records Administration (432o - RA), the village may wish to amend Section 12-3 for those structures in the SFHA to allow for post-construction and "time of future sale" inspection of properties to ensure that NFIP requirements continue to be in place, even if no violation is suspected.

To the extent and zone area possible, the village should prohibit the storage of hazardous materials in the SFHA, especially in residential and commercial areas. In addition, if possible, this ban on hazardous materials should be extended to those agricultural lots where no storage of fuel and other materials is currently in place. At this time, the zoning regulations for the village seem to only ban these materials in industrial areas. This would help fulfill the requirements of Development Limitations (432a – DL).

The village may wish to put into practice the requirement that all new construction/lots must have emergency access above the BFE (to the extent possible).

It appears that Section 3-1.2(A)(2)(iii) makes no provision for commercial structures in the SFHA.

Appoint a CRS Coordinator for the Village

The village should appoint a CRS Coordinator to manage the village's effort in the program. Generally, this person should have a comprehensive understanding of the village's flooding problems and all the departments and personnel that will be a part of the village's CRS program. The CRS Coordinator should also be customer service oriented, creative with outreach, and be able to manage a significant amount of recordkeeping.

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Elevation Certificates

Elevation Certificates (ECs) are a cornerstone of the CRS program. As noted in the *Coordinator's Manual*, "the CRS considers accurately completed Elevation Certificates to be evidence of a community's full compliance with the minimum requirements of the NFIP". It cannot be overstated the importance of proper collection, review, completion, and retention of elevation certificate records. So critical are elevation certificates to the CRS that if a community fails to adequately require and maintain their file of elevation certificates, the community will be expelled from the program.

Additional instructions on maintaining ECs are explained in Section 11, in 310 - Elevation Certificates.

Online training on ECs is continuously offered through several FEMA and other sites on the internet. To find course presenters and times, simply Google keywords "FEMA elevation certificate training".

Insurance of Village-Owned Properties in SFHA

The village must insure all municipally-owned properties to their replacement value or the maximum policy amount possible. An NFIP community is required to purchase as much insurance "that it could have purchased" for the protection of a building. It is particularly important that the village have full coverage on any building that has been part of a claim in the past.

Beyond those buildings with prior claims, the village should inventory other publically-owned structures in a commonsense hierarchy. Begin with structures that are of obvious critical need to the continual functioning of the government such as village hall, DPW barn, nursing home, sewage facilities, fire stations, etc., until the "importance" of the structure reaches properties such as well/pump houses, park restrooms, etc. Starting at the top of the list, insure these facilities down to the extent the village's budget will allow.

Remember that when the village begins to ramp up its CRS effort, the issue of "what buildings must be covered" can be one of the first questions posed to FEMA Region II or the ISO/CRS Specialist who will be guiding the village through the process. Before the village submits its application, ask "what will YOU (*the Regional FEMA CRS Coordinator or ISO/CRS specialist*) require for coverage for municipal buildings...." Experience seems to indicate that there is some flexibility here, and may vary from region to region.

Other Recordkeeping

Beyond elevation certificates, the village's CRS coordinator will be responsible for maintaining an extensive catalog of documentation to demonstrate outreach activities, floodplain development permits, planning and preparation reports, evidence of compliance, referenced ordinances, mapping, current and historical NFIP documentation, and other records as described in various CRS activities. Ideally, the village will have at least two sets of these documents, paper or electronic, and one will be archived off site at least one mile away from the SFHA and safe from other hazards (Regulations Administration - 432o).

The recordkeeping needs of each activity (if applicable) are described in the entry for the activity in the *Coordinator's Manual*.

6. Application Process

Letter of Interest

Schoharie must notify FEMA that the village would like begin the CRS review process and should contact Crystal Tramunti, FEMA Region II's CRS Specialist via email at crystal.tramunti@fema.dhs.gov or by phone at 212-680-3625 x3625 for more information on how to begin the formal process. The template letter to be used to kick off the process is available in the attachments or from FEMA's website at crsresources.org/quick-check/.

Sent with the letter is documentation demonstrating that the village has undertaken activities that will enable the village to receive credit totaling at least 500 points. It is recommended that the previously noted *CRS Quick Check* be used to tally the proposed creditable activities underway in the village.

Community Assistance Visit

Before the village begins the formal process of requesting a review of its readiness to be part of the CRS, it will need to request a Community Assistance Visit (CAV). In New York, the CAV is generally performed by the NYSDEC Regional office. Tom Blanchard, Floodplain Management Coordinator, NYSDEC Region 4, conducts CAVs for Schoharie County communities and can be reached by email at teblanch@gw.dec.state.ny.us or by telephone at 518-357-2379.

Application to the CRS requires that a CAV be conducted within six months of the ISO visit; therefore another CAV will need to occur before ISO will begin the CRS review process.

The CAV will consist of four elements:

1. The floodplain tour;
2. Meeting with local officials;
3. Examination of the floodplain permit, variance, and subdivision files; and
4. A summary meeting of the information gathered and issues identified.

CAV Guidance is more fully explained in FEMA's *Guidance for Conducting Community Assistance Contacts and Community Assistance Visits (CAV Guidance)* and can be found in the attachments or accessed online at fema.gov/media-library/assets/documents/23575?id=4917. Reviewing this document will offer insight to what actions and efforts are expected of the village prior to and during the CAV, however, a brief outline of CAV activities is provided below.

Floodplain Tour

As part of the CAV, the CAV officer will take a tour of the SFHA to visually review what is happening in the village's floodplain in order to get a general "feel" of the village's land use, to help in the review of permits and other records, and to assess the accuracy of the FIRM for the village. If possible, the village's Floodplain Administrator (FPA) should tour the floodplain with the CAV officer.

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The tour is conducted specifically to review how the community is administrating the SFHA within the requirements of the NFIP. To prepare for this tour, the village should be sure that proper permitting *and* follow up verification of approved projects has occurred to identify and correct potential NFIP violations and omissions.

Meeting with Local Officials

The CAV officer will meet with local officials to establish a relationship with the village, provide technical assistance, and to discuss any NFIP issues with the village. When a meeting is scheduled, village officials should come to the meeting prepared with a general knowledge of the purpose of the NFIP (and the village's responsibilities as a participating community), documentation of the village's regulation of its floodplains, the future of the village's floodplains, and be ready to discuss how the village administers the rules of the NFIP in Schoharie.

Village officials should review the document, *CAV Guidance* for more information regarding the CAV meeting.

Examination of Floodplain Development Permit and Variance Files

The village's floodplain development files are the documents associated with building in/near the SFHA and should include floodplain management development permits, building permits, zoning permits, subdivision files and/or variance files.

Ideally, a thorough review of a sampling of these files will be conducted going back to the last review at the time of the last CAV. For Schoharie, this will be limited due to the short time since the last visit by NYSDEC.

Following the proper review requirements for accepting documentation from applicants *at the time of submittal* will greatly assist in the keeping of an accurate floodplain development permit file.

Please see Appendix D in the *CAV Guidance* document for a worksheet used by the CAV officer to review floodplain development recordkeeping.

Summary Meeting with Local Officials

The CAV officer should provide a verbal overview of his findings to Schoharie officials pointing out both strengths and weaknesses found in the village's administration of the NFIP. Minor problems, if found, may be addressed by an offer of technical assistance. If applicable, larger issues will be addressed in a formal letter to the village that will suggest or require corrective action on the part of the village.

7. Earning Creditable Points

Overview

As noted above, to be eligible for participation in the CRS program, the village of Schoharie must earn a minimum of 500 points across a broad spectrum of activities that consist of a combination of community outreach, recordkeeping, local regulation, mitigation activities, and many other actions to protect the citizens and property of the village.

The CRS does not seek to “reinvent the wheel”. A successful CRS program will strive to, along with new municipal initiatives, incorporate what the village is *already doing* to educate the public, mitigate flooding, and prepare for the future through better coordination, recordkeeping, Schoharie-specific outreach, and building codes and other statutes, that within the bounds of law and the requirements of the NFIP, work for the village.

Credit Calculation

The complexity of the scoring of activity points can be an impediment to communities seeking to participate in the CRS. Determining the credit for each activity has up to five steps: Element Credit Points, Impact Adjustment, Credit Calculation, County Growth Adjustment, and Community Classification. While the ISO Specialist determines the final credit, the *Quick Check* and CRS Calculation software can be used to estimate possible scoring.

Impact Adjustment Map

A key tool in calculating points for activities based on the percentage of area/structures to be credited is the development of an Impact Adjustment Map (403). The Impact Adjustment Map is used for determining the credit for nearly 40 possible elements in 10 activity areas.

The map need not be created “new” for CRS, and can be digital or hard copy, but must be at a scale that enables accurate calculation. It is advised, however, that the village investigate using a GIS-based map as there will be many data sets that will need to be portrayed for the various activities. In addition, by using a GIS system, the base map may be updated, or revised, as needed.

A list of potential GIS data layers can be found in the attachments. Please note that not all the GIS layers named in the *CRS GIS Layers* attachment may be needed for Schoharie. The list seeks to be comprehensive to all possible CRS needs, not to those that might be required by the village of Schoharie.

CRS Uniform Minimum Credit

The CRS seeks to offer credit for State-mandated regulations required by New York law or statute through the CRS Uniform Minimum Credit (UMC). In New York activities credited to various degrees include Erosion and Sedimentation Controls, Water Quality Regulations, Stormwater Management Regulations, and others.

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In addition, based on the particular conditions of each community, additional state regulations may apply that may offer the chance for additional credits. These regulations pertain to activities related to building codes, freeboard, coastal hazards, levees, dam safety, and others.

Possible CRS credit for these requirements range from 173.6 to 767 points. In both cases (general and conditional) a review of the village's statutes and regulations should be conducted to determine if the village's codes and statutes have been updated to reflect current state law and to seek applicable creditable activities.

A comprehensive list of possible New York State-based credits may be found in the attachments or online at crsresources.org/files/200/umc/new_york.pdf.

8. Repetitive Loss

Structures that have multiple flooding claims are a small percentage (less than 2%) of the total number of flood insured homes and businesses in the NFIP. However, this small number of properties is an inordinate drain on the NFIP, constituting between 15% and 20% of all losses reported to the program! For this reason, the NFIP has a particular interest in identifying and formulating a plan to mitigate the flood risk to these properties through modifying, moving, or demolition of those structures in harm's way.

Because the Schoharie has more than 10 Repetitive Loss (RL) Properties, a special effort is required by the village to verify a list of properties forwarded by FEMA; annotate it for changes, corrections, and additions; create a map illustrating the areas of repetitive losses in the village; investigate and document the causes for the flooding; and conduct outreach to residents in RL properties. The village will document these activities and conclusions in a Repetitive Loss Area Analysis (RLAA). (512b).

As explained in additional detail under Activity 512b, while the village is required to document and publicize its efforts to reduce the hazards to its RL properties, care must be taken to adhere to privacy requirements outlined in Federal law.

9. Managing your CRS program

It is suggested that the village begin its CRS effort by starting "small", beginning with those items required by the CRS (such as elevation certificates, full insurance on municipal buildings, RLAA, etc.). The village should then begin to inventory those activities that are already being done, (such as current stream and ditch clean out procedures) and others actions, tasks, and efforts that may be occurring presently in the day-to-day administration of the village. Other smaller activities include working with the library to establish a body of flood information for the public, coordination with other agencies and governments to determine what resources may be available to the village (like webhosting), and making sure that the village has a full set of FIRMs for review and staff that can interpret them for the public, if needed.

The CRS's website provides several guidance and checklist documents that can be used to assist the village in the implementation of its CRS effort. The site can be found by navigating to crsresources.org/.

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As activities in the village's CRS effort begin to ramp up, the FPA for the village's program may find it helpful to set up a calendar of reminders to other village staff to reach out to determine if needed recordkeeping, documentation, and activities are being conducted on a timely basis. A calendar can also be used to ensure that required outreach and mailing projects are being completed on a regular schedule.

As noted above, the village should conduct a comprehensive review of its Flood Prevention Law, Village Ordinances, and Building Codes. While time consuming, it is to the village's benefit that all legislation within the village's control conform to the requirements of the CRS. Not only will this maximize the points possible in the CRS program, but more importantly will help the village become more flood resilient and safer for residents.

In addition, it cannot be emphasized enough that consistent, thoughtful, and accurate recordkeeping is the key to successfully managing a CRS program.

Ideally a backup of all CRS records will be kept both in physical form (as appropriate) and digitally, in an area outside of and at least one mile away from the floodplain.

While several of the elements of the village's CRS program (such as culvert maintenance along state roads) may be carried out, supervised, or initiated by others, because the CRS places the documentation and assemblage responsibility on the community seeking credit for the activity, the village's FPA should be the central repository of all CRS-related documentation, or at least be "cc'ed" on the needed records. The FPA has the responsibility to follow up with the various personnel both within and outside the village government to be sure that all activities and actions are occurring and any needed resultant materials are forwarded to the FPA's office.

Because the CRS community is required to obtain all needed documentation used in CRS credit, participation in the CRS program provides a terrific opportunity for the village to work with other local governments, the county, and the state, to strengthen the village's resilience to flooding and potentially share some of the costs and time needed for a successful CRS effort with those governments and other agencies.

The CRS provides additional credit for activities paid for or provided by non-governmental entities, such as realtors, insurance agencies, and other civic organizations willing to provide time, money, and resources. The more "buy-in" by residents and businesses, the more successful the village's CRS program will be.

The many activities of a community's CRS are highly integrated and when reviewing one element there will often be a need to "bounce around" to other activities to verify that a particular task has been carried out or that documentation has been completed and recorded. In addition, some activities may offer additional credits beyond their primary purpose. It is for this reason that all materials collected for CRS should be well labeled, annotated as to their creditable purpose (activity number, date, etc) and kept in the correct location in the file.

To ensure maximum credit, each document in the CRS file should be marked with the specific activity(ies) that the village is seeking points for that piece of "evidence". For example, Activity 542d, Stream Dumping Regulations, requires that specific language be in place in the village's ordinance that prohibits the placement of material that could impede the swift conveyance of water in streams and other

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storm water facilities. Therefore, a copy of the ordinance, should be highlighted, annotated to "Activity 542d", and placed in a folder/file marked as "542d".

On occasion, the same documents may be applicable for multiple activities. In those cases, a copy of the document should be placed in *each* activity file and marked-up citing how the document meets the requirements for that *particular* activity.

The ability of multiple persons or departments to edit and/or retrieve documents (e.g., the DPW supervisor, located in the village garage, completes the form noting that the named sections of Fox Creek have been cleaned; while the CRS coordinator may review the completed document and place it in the CRS file while seated in village hall), could be a powerful tool in managing the village's CRS effort. If multiple departments can place and access needed documentation in the CRS file from anywhere, the village may find it much easier to track its CRS progress.

10. Training

Schoharie should ensure that village staff overseeing the community's program are fully trained to meet the specific needs of the CRS. It is recommended that the FPA (and other's working extensively with CRS) obtain the Association of State Floodplain Managers (ASFPM) Certified Floodplain Manager (CFM) status. Not only does CFM training provide valuable programmatic knowledge to the village, each trained CFM (up to five) earns the village CRS credit (Regulations Administration (432o - RA1)) and additional ancillary points for review activities.

There are many training opportunities for CFMs and other professionals in floodplain management, mitigation, outreach, and other related topics.

FEMA's Emergency Management Institute (EMI) offers classes in Emmetsburg, Maryland, via the internet, and occasionally within New York State, free of charge for municipal employees. EMI Trainings E273 (Managing Floodplain Development through the National Flood Insurance Program) and E278 (National Flood Insurance Plan/Community Rating System) are particularly valuable for communities seeking to join the CRS

Contact EMI at training.fema.gov/EMICourses for a complete list of current course offerings. For information on possible EMI courses being offered in New York, the village may wish to contact William Nechamen, CFM, Chief, NYSDEC, Floodplain Bureau via email at wsnecham@gw.dec.state.ny.us or by telephone at 518-402-8146.

The CFM examination is offered at least once a year in New York State at the annual conference of the New York State Floodplain and Stormwater Managers Association (NYSFSMA) conference. This conference, generally held in the spring, offers a one-day refresher course the day prior to the CFM examination. However, this review is not designed to replace independent study before the exam. Please note that CFM applicants must contact ASFPM directly for exam fees, dates, and other information. Visit the CFM website at floods.org/index.asp?menuid=426 for more information.

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Additional training on a wide range of CRS topics including elevation certificates, developing outreach projects, higher regulatory standards, and many other subjects is available from crsresources.org/training. CRS training is available via the web from several sources including FEMA's EMI, training.fema.gov/EMICourses/ and the NFIP at h2opartnersusa.com/nfip-training/ec-made-ez-online/.

11. Activities

As with any program with a large number of options, the range of creditable points runs from relatively "easy" or self-sustaining such as Activity 352a – Flood Protection Library, to more complex activities like Activity 612e, becoming a Storm Ready Community.

The sheer number and the complexity of some of the activities can seem overwhelming at first glance. However, while a certain number of activities are required (ECs, RLAA, etc.), it is important to note that many of the groups of activities or individual activities can be compartmentalized and developed somewhat in a vacuum. This may make it easier to pick several activities to enable the village to begin the process of getting its CRS process off the ground.

A summary of some of the objectives, requirements, and difficulty of those activities pertinent to the village is contained below.

310 - Elevation Certificates

As noted above ECs are a central requirement of the CRS and can earn the village up to 38 points.

Data for the EC should be collected while the village still has the authority to require corrections to a structure (or part of structure) under construction. For new construction, the current FEMA EC must be used. Copies of the FEMA Elevation Certificate and the FEMA Floodproofing Certificate are available free in quantity from FEMA and can be downloaded from FEMA's website at fema.gov/national-flood-insurance-program-2/elevation-certificate. Instructions are included with the forms. (Non-residential floodproofed buildings must also carry a Floodproofing Certificate (FEMA form 086-0-34.))

ECs collected must be available for public inspection and should be kept in a separate file for this data. The files may be kept as hard copies or digitally, but should be kept in a manner that allows the EC to be pulled as a separate document.

Equally as important as collecting and maintaining the EC is making sure that they are completed fully and correctly. ECs provided by outside surveyors and others should be proofread and corrected *BEFORE* acceptance by the village. Errors and omissions on ECs presented to the ISO/CRS reviewer *will* result in loss of points and could result in other penalties.

ECs presented to the village with the surveyor's seal and/or signature should not be altered by village officials. Certified ECs with village-identified errors or omissions should be returned to the surveyor for correction or the surveyor may provide a corrective memo to be attached to the original EC. See Figure 310-3 in the *Coordinator's Manual* for an example of this form.

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To assist those submitting ECs to the village, the village may wish to make available partially completed ECs to surveyors at the time of the permit application. Parts A and B of the EC may be completed by the village before forwarded the form to the applicant. A partially completed EC for the village may be found in the attachments.

The village may also wish to require elevation certificates for all properties at risk of flooding, but not necessarily shown to be in the SFHA, both for a fuller database of properties in the village and to gain some points with little additional effort.

312a - Maintaining Elevation Certificates (EC)

Earning full credit in this activity and maintaining CRS status is dependent on the ECs in the village's possession to be correct and accurate. Thorough documentation, collection, and retention of ECs for structures in the SFHA (and beyond) should begin NOW.

The proper collection and retention of ECs is a keystone of a successful CRS effort and as explained above, training is available through FEMA to enable the proper review of ECs *before* they are accepted by the village.

312b - Maintaining Elevation Certificates for Post-FIRM Buildings ECPO)

Additional points can be garnered if ECs for other buildings built following the village's first FIRM in 1974 are also collected. This is not a requirement, but like 312c (the collection of Pre-FIRM ECs, it is an easy way to gain points as buildings are built, replaced or upgraded.

312c - Maintaining Elevation Certificates for Pre-FIRM Buildings (ECPR)

Again, no special effort need be made for this activity, but as buildings need changes, elevation data should be collected on them and kept in the CRS file.

320 – Map Information Service

Map Information Services (MI1 through MI7) is a series of personal actions that the village's staff will undertake to educate residents and others using the village's FIRM.

Credit in this activity is earned when village publicizes the availability of staff to explain what is shown on the FIRM and *voluntarily* offer additional information regarding flooding that may not be shown on the FIRM, such as historic flooding at the site, ice jams, and other hazards or flood related issues not shown on the flood map. Additional credit is given if the staff explains *why* certain areas should be protected due to natural floodplain functions. The village may wish to develop a "cheat sheet" or list of subjects that the village's employee should discuss with those seeking to view the village's FIRM. This aid could be attached to the MI Log discussed below.

This activity seeks to utilize the institutional and local knowledge that the village's staff has that cannot be shown on the FIRM. Such information could include local drainage problems, areas of flooding not shown on the flood map, areas subject to flooding by a dam breach, or any other risks not apparent on the FIRM.

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Village personnel must be able to access the FIRM when contacted by resident or other individual, be fully educated on how to read a FIRM, know what the various zones on the FIRM mean, and explain to the inquirer what zone the property is in.

In addition, at least yearly, the FIRM must be updated to reflect new development (if applicable). Void FIRMs (i.e. superseded versions) must be kept with other flood mapping information for historical reference. (Void FIRMs should be kept anyway, for credit under Activity 440 – Flood Data Maintenance).

Log or letters of service must be kept (see attachments – Map Information Log). The fact that the village can and will assist in the interpretation of the FIRM must be publicized through public outreach, (especially helpful as part of Activity 330 – Outreach Projects for additional points). Record of outreach must be kept in file.

322a - Basic FIRM Information (MI1)

To receive credit in this activity, staff must simply interpret the FIRM provided by FEMA and convey the basic data shown on the map, such as if the property is in the SFHA, FIRM panel number, the elevation datum used, and other information *present* on the FIRM panel.

322b – Additional FIRM Information (MI2)

The staff member explaining the FIRM to the resident or other individual must be able to locate and note to the requestor if the property is impacted by the floodway and explain the regulatory requirements of building in the floodway.

322c – Other Flood Problems Not Shown on the FIRM (MI3)

This activity uses the staff's intimate knowledge of the village to illustrate to requestors those areas that may be subject to flooding from such sources as simple local drainage problem (like a small ponding area) to major threats as in the case of a dam failure, but that are not shown on the FIRM.

322d – Flood Depth Data (MI4)

MI4 seeks to inform residents how deep flood waters will be at a particular location. Due to the technical requirements needed (GIS and flood depth inundation data); it may be more difficult to implement this activity. However, the village should consult with the county to determine if flood depth data is available and train staff on the use of GIS, if needed, so that this activity may be credited, if possible.

322e - Special Flood-Related Hazards (MI5)

Special Flood-Related Hazards is also likely more difficult to obtain as the areas in question, such as properties subject to ice jam flooding must be mapped for credit in other activities. Further discussion with the county or state to determine possible sources of this data may be warranted.

322f - Historical Flood Information (MI6)

MI6 requires particular data regarding the history of flooding at or near a particular site. Data provided can include photographs, high water marks, knowledge of injuries or fatalities, and/or other relevant information. Work in this activity might be an interesting side project for a local historian or other

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individual seeking to assist the village's CRS with obtaining, identifying, and cataloging historical database and integrating with a GIS system.

322g – Natural Floodplain Functions (MI7)

Credit is given if village staff point out areas that should be protected because of their natural floodplain functions. Areas identified as wetlands or critical habitat would fall into this category. At this time, using the US Fish and Wildlife Service's National Wetlands Inventory website (fws.gov/wetlands) and the NYSDEC's Environmental Resource Mapper (dec.ny.gov/imsmaps/ERM/viewer.htm), only two small areas of wetland have been cataloged in the village.

330 - Develop Outreach Materials

A major component of the village's CRS effort should be a coordinated outreach project to village citizens and property owners. Outreach is designed to increase awareness of the flooding risk within the village. Due to recent events, in a community like Schoharie, there is a likely a great deal of awareness of the flooding risk to life and properties in the area. It is important to remember, however, that memories fade, new residents and business owners move in, and community officials (with their institutional knowledge) retire. Therefore a regular and robust plan of Outreach Projects (330) should be instituted in the village.

Outreach Projects are an effective way to get citizens involved and the CRS rewards the community for the participation of non-governmental groups in the production and distribution of flood hazard risk and related information. Various activities, including mailings, public presentation by village staff and (more importantly) non-governmental representatives (like citizens or other interested parties), meetings with stakeholders, storm drain stencils, and many other methods may be utilized to disseminate the message. Documentation of all efforts, materials, and distribution plans should be kept for review.

332a - Outreach Projects (OP)

Outreach Projects will be based on one or more of six floodplain management topics and will be distributed or discussed at least once a year. Additional topics may be used if the village creates a complimentary Program for Public Information (PPI). Topics include flood insurance (required), knowing the flood hazard, protecting people from the hazard, natural floodplain functions, and others. To maximize credit, care should be taken to offer a full slate of topics via various media. A full description of the topics may be found on page 330-4 of the *Coordinator's Manual*.

An example of an outreach project flyer distributed to all properties in the SFHA in the town of Amherst, New York can be found in the attachments as *Outreach Flyer Example*. This mailing addresses five of the six priority topics and touches on several other important flood related issues.

332b - Flood Response Preparations (FRP)

Flood Response Preparations is the companion effort to Outreach Projects. FRP concerns public information projects that will be used in the event of a flood. The key is that the materials must be created *before* the emergency, be updated at least yearly, and be ready for distribution at the time of a flood. Provided that the required review and updating of the FRP materials occurs, even if a community does not experience a flood during the year, the village would still receive credit for this activity based on the quality/content of the materials.

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332c - Program for Public Information (PPI)

A Program for Public Information (PPI – 332c) is an extension of the outreach plan that the village will develop. Its value comes from its effect of acting as a multiplier for activities under OP and FRP. The implementation of PPI requires that the village set-up a committee composed of village officials and citizens to organize, oversee, and report on the outreach and flood response preparation efforts of the village.

While a powerful tool for a community, it is recommended that its implementation be delayed until the village's CRS program are up and running.

332d - Stakeholder Delivery (STK)

Stakeholder Delivery (STK – 332d) is tied to PPI and cannot be credited until PPI has begun.

340 - Hazard Disclosure

The purpose of Hazard Disclosure is to provide potential buyers of the risk *before* they have settled on a property to the exclusion of other potential homes or properties. This activity is a mix of state and local government and private real estate agent effort.

342a - Disclosure of the Flood Hazard (DFH)

This activity is fully dependent on the effort and cooperation of at least five local real estate agents transacting property sales within the village. Implementation will require that agents showing homes or properties for sale disclose to buyers at the beginning of the process specifics as to the flood hazard of the property, preferably on the listing page. Initiation of this activity will depend on the village's relationship with local realtors and their willingness to present the risk to potential buyers.

352b - Other Disclosure Requirements (ODR)

Based on New York State law, 25 points are awarded to all communities within the state. No action by the village, other than a copy of the state law in the CRS file, is needed to receive these points.

352c - Real Estate Agent's Brochure (REB)

Like DFH, this activity requires the participation of the local real estate agents. The village will provide a simple flyer/brochure to real estate agents that will be offered to all potential buyers. A template for the village of Schoharie can be found in the attachments. The brochure should be available at a real estate agent's office should the ISO/CRS specialist decide to "test" the use of the brochure at a local office.

352d - Disclosure of Other Hazards (DOH)

For Disclosure of Other Hazards, the village must be actively participating in getting the messages found in DFH out to the public and have information on other flood related hazards for particular properties, such as dam breaks. Information should be distributed at the same time as DFH materials.

Implementation of this activity could be difficult, as the thought of a dam break is scary to potential home buyers and because most of the village's structures are in the flood zone for a Gilboa Dam failure.

350 - Flood Protection Information

Activity 350 seeks to provide relevant flood hazard information for residents without having to go to the village hall or other governmental building or official. In this activity, the village will make available information at the local public library and the village's website.

352a - Flood Protection Library (LIB)

Based on Schoharie's inland location, a set of eight FEMA documents must be placed and cataloged in the local branch of the library for credit under Flood Protection Library. While FEMA provides a list of 10 required documents, two of the brochures are not relevant to Schoharie's location far from the coast and are therefore not required. A list of the documents can be found in the attachments as Flood Protection Library Documents. Activity will require the cooperation of the local library and staff to incorporate them into the library's catalog system.

352b - Locally Pertinent Documents (LPD)

Locally Pertinent Documents is the companion to LIB and should be implemented with LIB. Documents in this group might include a copy of the village's floodplain ordinance and building code, a copy of the village's FIRM, and any other documents with local floodplain implications. While the available points for this activity are relatively low, it is one of the easier and self-sustaining elements to do.

352c - Flood Protection Website (WEB)

In the village's case, this credit could be approached in three ways: The first way would be for the required information of this activity to be placed in a location central to all visitors to the county's website. That is, located at schohariecounty-ny.gov/CountyWebSite/index.jsp. By placing the information there, the village invites discussion of its CRS goals with other communities in the county (which could lead to the sharing of CRS costs, efforts, etc.) The downside is likely less control of the information, its administration, and site maintenance. The second option is using the village's portion of the Schoharie County website at schohariecounty-ny.gov/CountyWebSite/villsch/. Depending on who administers the village's page on the website, the village may have more control of the information and documentation and how it is presented on the site, which is important when calculating points. If the village wishes to continue its website connection through the county, the village should begin to add information and links to the county's or its portion of the Schoharie County website as soon as possible.

Lastly and more involved, but best, would be for the village to develop its own website, either for the benefit of *all* village interests (tourism, farmer's markets, local official contacts, taxes, etc.) or simply a website designed to facilitate CRS information to village residents.

WEB is a terrific opportunity to involve the public. While a flashy website always draws eyes and invites readers, it is not required that a professional web designer or other professional create or maintain the site. WEB may be a great place to get a dedicated volunteer to get involved in the village's CRS effort. Anyone with an interest and some ability, Boy or Girl Scout, college student, retired person, or other, should be encouraged to help.

Credit for this activity is increased significantly when integrated with PPI.

This activity is broken up into three parts:

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WEB1: Detailed information on flood protection messages

WEB2: Information on warning, safety, evacuation, and other topics of immediate concern

WEB3: Link to real time gauge data. (The village may wish to use the USGS Gauge named "Schoharie Creek at Breakabeen": waterdata.usgs.gov/ny/nwis/uv?site_no=01350355)

WEB4: Post elevation certificates on site

Engaging in this activity is highly recommended due to its general utility to the community and its relative ease in executing. The village of South Holland, Illinois, a smaller community with a population of approximately 22,000 has achieved a Class 5 CRS Rating and has a well organized flood information page on their website. It can be found at southholland.org/index.php?page=FloodAssist. In addition, an example of the flooding information page from the website of a Class 1 community may be found at roseville.ca.us/pw/engineering/floodplain_management/. Lastly, closer to home, the town of Amherst, Erie County, New York, is currently one of the three Class 7 CRS communities in the state. The flood information page from their website can be found at amherst.ny.us/govt/govt_dept.asp?dept_id=dept_04&div_id=div_04&menu_id=menu_09

360 - Flood Protection Assistance

The goal of this group of activities is to encourage face-to-face contact with those in the community who may need flood information or assistance. Much of this credit would come from what village staff is likely already doing. But like everything else with CRS, documentation is key. While these activities can be fairly labor intensive, the personal contact with residents and business owners can be invaluable.

What Flood Protection Assistance seeks to do is offer informed *personal* general assistance to residents on flood related matters in the village.

362a - Property Protection Advice (PPA)

This activity is again one that village personnel are likely providing on a regular basis. The key to getting credit will be to formalize the one-to-one effort, publicize it, and to keep records of interaction with the public. The most difficult aspect of this activity may be is recording interaction with the public and documenting the technical qualifications of village staff, (if used). In addition, technical or topical training may be needed for staff.

362b - Protection Advice Provided After a Site Visit (PPV)

This activity is intended as a follow-up to PPA and the goal is to provide specific advice to the property owner during a site visit. Providing this service will require the commitment of staff to visit sites in a timely manner when requested to do so, to keep records of the visit, and what topics were discussed. This is a valuable service to provide to the village, but is also somewhat labor intensive.

362c - Financial Assistance Advice (FFA)

If pursued, the village may wish to farm out this activity to the county or other agency. Somewhat technical, the person with this responsibility will be required to be well versed in the various sources of financial assistance available for properties at both the pre- and post-flooding stages of an event. If

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conducted by another person or agency on behalf of the village, the village will be responsible for obtaining and keeping with the CRS file the required documentation that indicates that this service has been provided to the public for the village.

362d - Advisor Training (TNG)

Those dispensing advice within the village can be offered the opportunity to train at FEMA's EMI in Emmitsburg, Maryland. This comprehensive training enables the employee with topic-specific information that can be used to help educate the residents of the village. EMI classes may also be offered at other locations within New York and on-line. And when combined with other activities, staff training from EMI also earns CRS points.

370 - Flood Insurance Promotion

A village goal should be to get as many people to obtain the appropriate level of flood insurance coverage as possible for those properties vulnerable to flooding, regardless of location. This includes those properties with no mortgages and those outside of the SFHA, but prone to flooding for other reasons (unmapped stream flooding, dam failure, ice jams, blocked culverts, overland sheet flow, etc.). The takeaway message should be repeated again and again:

Flood Insurance = Faster Recovery!

This series of activities is a great way to get local insurance agents involved and informed about flood insurance needs in the village.

372a - Flood Insurance Coverage Assessment (FIA)

The Flood Insurance Coverage Assessment is a good exercise to obtain a fundamental understanding of the status of flood insurance in the village. Using data provided by FEMA and the village or other local authority (town/county), Schoharie will map its current state of flood insurance coverage in the village. The findings will be presented to the village board. This activity is another good opportunity to involve outside governments (County GIS department) in the village's effort.

372b - Coverage Improvement Plan (CP)

A mixed committee of village officials, pertinent professionals (e.g., insurance agents, lenders), and citizens will take the information provided by FIA and create a plan to increase the rate of coverage in the village. The resulting report will include several elements including what is being done in the village to promote flood insurance, desired outcomes of coverage, project descriptions, how progress will be monitored, and other actions. CP may be made a part of PPI, if PPI is pursued.

382c - Coverage Improvement Plan Implementation (CPI)

This activity is the practical result of the preceding two activities. To achieve points, at least one of the proposed projects from the Coverage Improvement Plan must be undertaken within the village.

410 – Floodplain Mapping

Floodplain Mapping encourages communities to commit funds and efforts to improve the accuracy of the mapping that defines the flooding hazard for that jurisdiction. For a small community, this activity group can be difficult to implement without outside funding. For that reason, the requirements of this family of activities are discussed only briefly in this document.

412a – New Studies (NS)

Because the village's two main flooding sources have been studied in detail, points for this activity will likely only come for development in areas of the village not currently mapped as Zone AE, such as potential development along an upland stream on the eastern side of the village, if appropriate. Studies to be credited must exceed the NFIP minimum.

Following any work done by a developer or other source, the village must adopt and use the new data as part of its floodplain mapping.

412b – Leverage (LEV)

This activity may be more obtainable because it asks only that the village or other non-FEMA agency or organization provide some funding for a study. Points are based on the percentage of the study funded by NON-FEMA monies.

412c – State Review (SR)

Simply put, credit is given under this activity if the results of a study are independently reviewed by the state of New York or other agency qualified to conduct such a review.

412d - Higher Study Standards (HSS)

As the name implies, credit is given for those studies that exceed the NFIP minimums.

412e - More Restrictive Floodway Standard (FWS)

Obtaining points in this activity would require that the village disallow any rise in mapped floodways.

412f - Mapping for Special Flood-Related Hazards (MAPSH)

In Schoharie, known hazards such as ice jams, land subsidence, or mudflows would have to be studied, mapped, adopted, and regulated to, to get credit for this activity.

412g – Cooperating Technical Partner (CTP)

Should a case arise that the village is in the position to provide technical data to FEMA for the purpose of increasing the accuracy of the FIRM for the village, it may wish to consider becoming a CTP with FEMA. At this time, the state of New York is a CTP, but this does not qualify the village for credit. Alternatively, should the county or other regional agency become a CTP, it may be possible to earn credit under this activity, provided that the village is directly affected by the data or activities of the CTP.

Becoming a CTP should be a long-term CRS goal.

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420 - Open Space Preservation

With up to 2020 points available, the Open Space Preservation set of activities could be the most advantageous section of the entire CRS program for the village. Much of the scoring involves what percentage of land in the village is preserved as undeveloped (or appropriately used) open space. Fortunately, at this time, much of the village's floodplain remains as open space, though not yet protected.

A valuable source of CRS credit, points for Open Space Preservation is given for those lands protected through special use (such as a park or other low impact use) or via deed restriction; natural function preservation; open space incentives; low density; or other means. An overview is provided below.

What counts?

Ballfields, parks (local, county, state), deed-restricted farmer's field, other protected properties in SFHA without insurable structures, properties owned by non-governmental organizations, lands used for open space (Boy Scout camps, hunting club, etc), and lands protected by ordinance or local law from development based on zone (such as floodway). Acquisition or deed restrictions must be permanent.

What doesn't count?

Parking lots, properties used to calculate other creditable activities, buildings, areas with fill placement, areas zoned or planned for future non-open space use (vacant lot in an industrial park), other unmapped property, and property outside of the jurisdictional control of the state or local government (such as property owned by the Federal government).

Needed for Credit

A map or list of the properties to be considered

Documentation stating that each qualifying property is "preserved" (prior to application) must be presented with the application.

If "open space" by ordinance or law, a copy of enacting legislation

Impact Adjustment Map

Credit is based on the percentage of protected area the total area of the SFHA in the village.

Specifics to each element are noted in each following section.

422a – Open Space Preservation (OSP)

Because up to 1450 points are available in this activity, Open Space Preservation can be the most effective way to rack up CRS points and, as noted above, the village starts this process in a good position for this credit.

OSP works when property in the SFHA is used in a manner or has been preserved from development so that the land will continue to serve as a useful component of the floodplain and that additional insurable structures are not built in harm's way.

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A successful OSP program can have several parts; in addition to properties held by state or local governments and meant to be used as open space, (such as the baseball fields at the northern end of the village), private lands used for open space purposes such as a Boy Scout camping area, hunting clubs, golf courses, and other properties meant to remain open, and other private lands, such as farmland can contribute to the total area considered as open space under this requirement. The village may wish to establish relationships with land conservancy groups such as the Nature Conservancy, the Trust for Public Land, Ducks Unlimited, and other state and national organizations to determine if other methods of funding the preservation of potential open space properties might be available to the village.

Working with its legal counsel, the village should actively seek out willing landowners who will agree to permanent easements on their property that preserve open space within the village. Barring that, the village should attempt to guide future development of the SFHA so that as much of the land remains in an undeveloped state through agreements on how the land is developed using zoning, cluster development, rights transfers, or other methods to separate development from protected properties. In addition, explaining the difficulties of building in Schoharie's extensive floodway (which through most of the village extends between 1500 and 2000 feet eastward from the creek) may help motivate landowners who may believe that development of these properties is a "sure thing". To qualify as "open space", properties must be permanently protected in a legally binding document and or agreement. This means that even the titles of public parks must be reviewed to be sure that the transfer of the park to the government is in perpetuity.

The key to keeping options open on open space is to avoid the placement of permanent infrastructure improvements that could, at some future date, lead to construction in the SFHA. Therefore, plans for even relatively benign uses such as parks, campgrounds, farming, or other "passive" uses should be carefully considered before implementation.

422b - Deed Restrictions (DR)

This activity is a natural follow-up to OSP. DR essentially completes the process of permanent open space preservation by insuring that future changes in administration or a diminishing commitment to protecting the floodplain do not undermine today's efforts. DR seeks to ensure that today's restrictions remain in place and cannot be altered without going to court.

Once a property has been deemed OSP, its deed history should be checked to be sure that permanent development restrictions have been properly placed on the property, as mentioned in OSP, even public parks can be sold if there is no prohibition on a later sale when it was acquired by the municipality. If it has been found that the property has not been fully protected in perpetuity, changes to the deed should be made and recorded that no new building that would jeopardize the property's OSP status may be constructed; that the restrictions run with the property; and that the protections in place cannot be changed by a future owner other than for cause through court action.

422c - Natural Functions Open Space (NFOS)

This activity may have limited utility in the village as there is little undeveloped land in the village's SFHA that is not currently being farmed or used in other non-natural ways. Natural Functions Open Space requires that the land credited be in a pristine or restored state.

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However, there is a wooded property northwest of the corner of Bridge and Orchard Streets that may provide an interesting case (based on how it might be subdivided someday) of allowing some appropriate development along Orchard Street while preserving the majority of the property as OSP and possibly NFOS.

422d - Special Flood-Related Hazards Open Space (SHOS)

SHOS is a complex activity requiring the mapping of non-SFHA areas such as properties subject to ice jams, mudslides, and other special flooding conditions. If the village faces any of these other hazards, it may wish to consider this activity at a later date.

422e - Open Space Incentives (OSI)

At least some credit should be easily obtainable for this activity. OSI rewards communities that for whatever reason may not be able to prohibit all construction in the SFHA. OSI seeks to encourage communities to closely regulate any development in the floodplain and minimize its impact through cluster development, tax incentives, rights transfers, and other zoning and land management mechanisms. OSI is broken into seven segments and several will be appropriate for Schoharie.

The village should revisit its zoning and land use regulations to insure that both open space AND currently developed property (with the potential for redevelopment) are properly zoned with the flexibility to reflect greater density where beneficial.

422f - Low Density Zoning (LZ)

The village should strive to protect the current open state of much of its floodplain now being utilized as farmland, and because Low Density Zoning does not constitute a taking, it is perhaps the best tool the village may have to replace points not achievable via OSP. While not a one-to-one substitute for possible OSP points, LZ may work well for the village due to its large area of SFHA currently zoned for agriculture. The village's current lot size minimum standards in areas zoned for "agriculture" should be examined and an effort should be made to assure that those areas remain zoned as such and are further protected by the imposition of lot sizes of at least five acres, and preferably 10. This change will enable the village to accumulate a large number of points though LZ for those private properties unable to be placed under OSP criteria.

422g - Natural Shoreline Protection

The undeveloped shorelines of Schoharie and Fox Creeks will provide a fair number of points under Natural Shoreline Protection. Points for this activity are based on the percentage of stream bank NOT hardened or otherwise altered. A visual review of the creeks in the village seems to indicate that nearly 100% of shoreline within the village's corporate limits is in its natural state.

The village should update or strengthen regulations prohibiting the hardening or altering the shoreline of creeks within the village.

430 - Higher Regulatory Standards

Higher Regulatory Standards provides an opportunity for the village to set in law requirements that will protect both future construction and existing properties from changes in land use and environmental

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changes within the control of local authority. These standards also have the benefit of being static and can be maintained with little year-over-year attention.

Insisting on higher standards with the force of law will protect the village's citizens and properties for generations.

432a - Development Limitations (DL)

If the village determines that it cannot fully implement the requirements of OSP, Development Limitations may offer a piecemeal approach to restricting development in the floodplain, while still earning points for the effort.

The three main sub-activities in DL concern the prohibition of fill, various structures, and the storage of materials in the SFHA. Of the three, DL1, the prohibition of fill and DL3, the storage of certain or all materials, may offer the village the most likely path of success short of banning all construction in the SFHA.

To comply with DL1, the village's Local Law would have to be strengthened to prohibit fill in sections 1.2, 3.5, 4.2, 5.1, and other sections that may be impacted by a ban on fill in the SFHA. For DL3, additional notations should be inserted into the Local Law outlining what materials are prohibited in the SFHA and/or where they may be stored (e.g., "hazardous materials must be stored above the BFE").

432b – Freeboard (FRB)

As every resident of the village knows, the "100-Year Flood" is no longer the 100-year flood...large floods in the Schoharie Valley seem to be coming with increasing frequency. Freeboard acts as physical insurance to protect new and substantially improved buildings from the possible increases of flood heights in the future.

While the minimum NFIP requirement is that structures (based on their type) be built or floodproofed *only* to the base flood elevation, New York State's minimum freeboard requirement is now two feet above the BFE.

At a minimum, the village should ensure that the NYS Building Code requirements are reflected in its local law including the requirement that *all utilities* and other service requirements be elevated two feet above the BFE.

It is also recommended that the village amend its local law so that the freeboard requirement exceeds the minimum standard noted in New York State Building Code, Section R324.1.3.3, and increase its freeboard requirement to three feet to the widest extent possible, (as the village may wish to keep the two foot standard in the central business district), and prohibit fill under structures to insure maximum safety and CRS points.

432c - Foundation Protection (FDN)

This activity should be implemented through the village's local law or building code. In particular, sub-activity FDN1 should be considered as it prohibits the placement of fill and offers the most points for the village.

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432d – Cumulative Substantial Improvements (CSI)

CSI would require that the village track building permits and structural improvements that may increase the value of a property beyond the 50% value threshold where compliance with the regulations of the NFIP becomes mandatory. While the usefulness of CSI is obvious, the activity is potentially record- and labor-intensive to properly monitor. It is recommended that effort in this activity be deferred to a later date.

432e – Lower Substantial Improvements Threshold (LSI)

Like CSI, LSI works with the “substantial improvement” threshold to require property owners to build to current standards that are in place for new structures. In this case, LSI drops the value level, from the NFIP minimum requirement of 50% to some value below that figure or by placing a limitation on the size of the addition before the higher regulations kick in.

Like some other proposed actions in the CRS, this one could be met with resistance, as it will immediately affect how property owners can improve their home/business.

432f - Protection of Critical Facilities (PCF)

Based on the experience of the village during the last flooding event, this activity should be carefully considered. If not already done so, a review of the village’s regulations governing the placement of critical facilities (within its prevue) should be conducted to ensure that, to the practical extent possible, critical facilities within the village are protected from flooding. The strongest statute would remove these facilities from the SFHA completely. However, the CRS acknowledges that this may not be possible in all circumstances. Therefore, the CRS rating for this activity can be weighted to account for measures short of prohibiting critical facilities in the SFHA, but that mandate extra protections and mitigation of these structures.

And because the 500-Year flood elevation for most of the village is generally within a foot of the BFE, it is recommended that the regulatory language govern to the 500-Year flood elevation.

432g - Enclosure Limits (ENL)

While it is recommended that the village enact this activity, the practical limits of what the village can do to physically inspect (after the fact) and maintain records of non-conversion agreements should be considered. Enclosure Limits seeks to maintain the good building practices that the village has put in place at the time of construction by prohibiting the conversion of space below the “BFE-appropriate” first floor to living space that would be destroyed in the event of a flood. However, due to the need for access and follow-up inspections for credit criteria “3”, it is recommended that the village prohibit any enclosures (excepting screening and other “see through” materials) for areas of structures below the BFE.

432h - Building Code (BC)

A major part of village’s effort should be to comprehensively review the building code it uses in order to bring it into line with the requirements of the CRS. In general, the building code will be adequate to meet the needs of the CRS and NFIP, but due to the village’s floodprone nature, special care should be made to put into writing commonsense requirements in the code, such as additional freeboard, no enclosures below the BFE, and any other protections that might be unique to the village’s needs.

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This activity can be thought of as administrative and based on the passive nature of this credit, once the changes are in place, beyond enforcement; the village should only see benefit (points) with little year-over-year costs. If the current building code requirements (through any method or code) of the village can be improved, the scoring of this activity will go up.

432i - Local Drainage Protection (LDP)

This activity, like all the suggested actions in the CRS will positively impact any community willing to implement them. However, because the requirements of LDP must be enforced village-wide, its requirements may exceed the village's willingness to regulate to this extent outside the SFHA. In addition, local building traditions, such as the desire to place a basement in a new home, may preclude their implementation.

It is believed however, that the village could still receive partial credit for the implementation of LDP2 and LDP3 provided that basements in the non-SFHA areas of the village are protected from local flooding. LDP2 and LDP3 direct the community to ensure that local drainage does not affect new or improved structures and that the design of properties causes water to flow *away* from the foundation. A review of the village's building code should be undertaken to incorporate these changes, if desired.

432j – Manufactured Home Parks (MHP)

A review of aerial imagery seems to indicate that there are no mobile home parks within the village. In addition, the village's land use law prohibits the installation of new mobile homes, except in the case of a replacement of an existing manufactured home; therefore this activity does not apply to the village. .

432k - Coastal A Zones (CAZ)

The village has no coastal A Zones

432l - Special Flood-Related Hazards Regulations (SHR)

Like earlier references to this set of hazards, the village would be required to identify, map, adopt, and enforce regulations addressing other flooding hazards such as ice jams and mudflows.

It is recommended that the village establish its CRS program on solid footing prior to implementing this and other related activities.

432m - Other Higher Standards (OHS)

Other Higher Standards provides the village with the ability to be innovative with its flood prevention regulations and create standards that can be tailored to the particular needs of the village. As noted in the *CRS Manual*, OHS can be used to credit the efforts not covered under other activities, such as dry land access, a prohibition on septic systems in the SFHA, and other means of limiting damage due to flooding.

The village may wish to research or discuss what actions might work based on the circumstances of the village's unique placement in the Schoharie's SFHA.

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432n - State-Mandated Regulatory Standards (SMS)

This is a passive activity that rewards the village for being subject to particular state required regulations. Points are based on those state mandates that apply to the village's location and geography. For example, regulations concerning coastal issues will not be credited to an inland community such as Schoharie.

432o - Regulations Administration (RA)

Regulations Administration is a mix of "follow-up" activities involving records, staff training, and building inspection requirements. While the first two requirements should be undertaken without hesitation, the re-inspection mandates for credit under this activity may not be socially viable in the village at this time. Further discussion among village leadership will have to take place to determine if the effort is worth the points.

The benefits of staff training for village employees aspect of this activity (RA1) is likely more important to the safety of the village than the points available. Training through EMI ensures that village staff has a vested interest in maintaining the CRS program in the village.

The village should also determine its Building Code Effectiveness Grading Schedule (BCEGS) rating. To earn this credit (RA3), the village must have a rating of 5/5 or better

The next two elements may not be socially acceptable in the village, but should be explored. RA3 and RA4 require that the village have the right to inspect a new building at least three times during the construction process and that it be enabled to re-inspect properties, in perpetuity, at the point of resale or new rental after construction has been completed. For obvious reasons, these requirements may involve more intrusion onto private property than the village is willing to undertake.

Off-site records storage (RA5) is simply good policy and need not be an expensive endeavor. The records retained can be stored digitally, but must be stored out of and at least one mile away from the SFHA.

440 - Flood Data Maintenance

This family of activities seeks to make flood plain data available and useful so that accurate information can contribute to better local regulations, planning, insurance ratings, and other uses. In addition, due to its technical and cost requirements, 440 is a good opportunity for communities to work together and pool resources. 440 is a mix of activities, some passive and some that will take some effort on behalf of the village.

442a - Additional Map Data (AMD)

A review of the county's GIS website demonstrates that much of the data needed for credit in this activity is currently available for public review. For full credit, coordination with the county will be required to locate and make available for use by village staff and the public creditable data layers not currently shown on the county's GIS website.

442b - FIRM Maintenance (FM)

FIRM Maintenance is a straightforward activity that simply requires that the village have a copy of every floodplain map produced by FEMA for the village since the first edition in 1974. A review of the history of flood mapping for the village indicates that five flood maps have been published over the years. In

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in addition to the 2004 version of the FIRM currently in effect for the village, Flood Hazard Boundary Maps (FHBM) were published on May 31, 1974 and November 7, 1975. Following a revision to the mapping for the village, the first FIRM was published on August 1, 1987 and was revised on July 5, 1993. Atkins has found copies of the 1975, 1987, and 1993 editions of the flood mapping and will provide them to the village, if needed. However, Atkins has been unable to locate the version from 1974. The village should make an effort to find this edition of the FIRM, have them all integrated into the county's GIS system, and have them kept with the flood mapping files for historic and public reference. FEMA's Map Service Center (MSC) may be able to assist in locating the missing copies. The MSC may be contacted by visiting their website at msc.fema.gov or by telephone at 877-336-2627.

442c - Benchmark Maintenance (BMM)

Any known benchmarks in or adjacent to the village should be cataloged and "recovered" if necessary. Benchmark Maintenance seeks to provide the village with a set of reference points that will enable the correct determination of elevation for new and improved structures throughout the village.

Should there be benchmarks in or near the village that meet the criteria outlined in the *CRS Manual*, the village should make an effort to participate in this activity. BMM may provide an opportunity for public involvement in the village's CRS effort through "recovering" and recording appropriate benchmarks around the village.

442d – Erosion Data Maintenance (EDM)

This activity is for coastal areas only.

450 - Stormwater Management

Many of the possible points in this cluster of activities are provided by state mandated activities. Because the state of New York requires that municipalities and developers follow certain minimum requirements, jurisdictions within New York that are at least following the state mandates are awarded points in the Stormwater Management Regulations (452a), Erosion and Sedimentation Control Regulations (452c), and Water Quality Regulations (452d) activities.

"State credit" in the Stormwater Management cluster of activities can provide a great number of points, however, in discussion with the village's planning consultant, it has been determined that there is no Watershed Master Plan that covers the village. It is recommended that the village consider discussions with neighboring communities and the county to explore the formation of a body to begin the process of enacting a Watershed Master Plan for the Schoharie Creek watershed.

452a - Stormwater Management Regulations (SMR)

This activity seeks to manage runoff from new development. Points in SMR are achieved by the community regulating the size of development that must meet the community's SMR ordinance, the size of the storm runoff that facilities must contain, low-impact design regulations, and the public inspection and maintenance of facilities designed to comply with the ordinance.

The regulations or ordinances that the village may have enacted should be reviewed to determine if even more points might be available if the village exceeds the state's minimum requirements.

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542b - Watershed Master Plan (WMP)

As the village consists of less than one percent of the watershed for Schoharie Creek, cooperation with other jurisdictions will be needed to make this activity work for the village.

452c - Erosion and Sedimentation Control Regulations (ESC)

Erosion and Sedimentation Control Regulations is based on the minimum size of the disturbed area that is regulated during the time of construction. Again, while the state mandated regulations will provide the village with 10 points, due to the small size of many of the lots in the village, it may benefit the village to require the minimum square foot threshold of 1000 sf., (if not already required in its ordinance), to gain the greatest number of points in this activity.

452d - Water Quality Regulations (WQ)

Water Quality Regulations is based on legislation that is enacted to protect the quality of water from pollution from sites within the village. Following state regulations will provide 20 points in this activity.

510 - Floodplain Management Planning

Floodplain Management Planning seeks to credit communities for efforts that will reduce the adverse impact of flooding on existing buildings. Due to the slow growth of many upstate New York communities, including Schoharie, this series of activities will be central to the village's CRS effort.

512a - Floodplain Management Planning (FMP)

Under this task, the village may be able to leverage existing effort and planning that was conducted during the creation of the Schoharie County Multi-Jurisdictional Hazard Mitigation Plan (HMP). The requirements for using the county's HMP for points under this activity are very specific and a careful review of the entire HMP will be required to determine if it can be used. While rich in potential points (up to 382), due to the complexity of the review/requirements, the village may wish to delay the implementation of this activity until a later date.

512b - Repetitive Loss Area Analysis (RLAA)

This activity seeks to help the village understand the causes and possible solutions to its Repetitive Loss (RL) areas. Due to the number of RL structures in the village, identifying, cataloging, outreach, and reporting on the RL buildings in the village will be an important (and required) part of the village's CRS effort.

In the short-term, this will likely be, by far, the most difficult and involved CRS project the village will undertake. However, while not an easy task, the RLAA effort can be somewhat compartmentalized and could be a good project for a team of students or others seeking to assist the village in achieving its CRS goals.

RLAA involves contacting RL property owners to seek input, gaining basic data on RL structures, exploring possible solutions to the repetitive flooding problem, documenting the conclusions of the finding for each RL area, offering the results to officials, the public, and the media, providing an action plan to resolve the flooding issues for the structures, and evaluate and update the problem and solutions annually. As noted earlier in this review, when publishing information related to the RLAA, the village

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must take care not to publish information that could identify individual properties or owners; therefore addresses, names, claim payments, and other sensitive information must be removed from the report prior to its release to the media and public. A copy of the city of Alexandria, Virginia's RLAA has been edited for privacy and attached to this guidance and may be found in the attachments to this document. While Alexandria's RL properties are wholly commercial or multi-family structures, the tools and conclusions found in the RLAA will be helpful to the village in its future RLAA.

The RLAA should be one of the first tasks undertaken in the village's CRS effort. Not only will it be required for entry into the program, its successful completion can generate up to 140 points and most importantly the analysis done may offer valuable insights into possible solutions to flooding problems for individual properties in the village. Also, due to its public outreach requirements, it is also a terrific opportunity to determine what outreach strategies might work best in the village and to introduce the CRS to residents as a beneficial activity worthy of the village's effort.

412c - Natural Floodplain Functions Plan (NFP)

A successful NFP will codify the village's efforts to protect and/or restore the floodplain's natural benefits to the ecosystem.

Based on the geographic size of the village and the fact that the majority of floodplain is used as farmland or other "non-natural" use, it is unlikely that the village will benefit from this activity at this time.

520 - Acquisition and Relocation

An expensive and time consuming program, this activity will require a great deal of time and resources to manage. Because of this, the village may wish to delay implementation of this activity until a later date. However, if an effort has begun to remove buildings that have been flooded, then the village should start to catalog and retain the records, documents, and activities required for credit for this action.

Due to the time and costs hurdles of these activities, their requirements will only briefly be covered below.

522a - Buildings Acquired or Relocated (bAR)

bAR provides credit for buildings removed from the SFHA since 1974.

522b - Buildings on the Repetitive Loss List (bRL)

As noted in Section 8, Repetitive Loss, RL buildings are a monetary drain on the NFIP, therefore this activity provides twice the points if structures found on the village's RL list are removed from the SFHA. The RL building need not be in the SFHA.

522c - Severe Repetitive Loss Properties (bSRL)

Currently, there are no structures within the village that meet the criteria (four or more claims) for credit under this activity.

522d - Critical Facilities (bCF)

Over the long term, the village should consider moving those critical facilities under its authority (such as the village DPW barn, village hall, etc.) out of the 100- and 500-year flood zones as shown on the FIRM

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in effect at the time of the proposed move. More important than the points available for this credit is the security of these facilities in time of emergency.

522e - Buildings Located in the V Zone or Coastal A Zone (bVZ)

As the village has no V or coastal A Zones, this activity (522e – bVZ) is not applicable.

530 - Flood Protection

While the removal of a building from the SFHA is the best defense from the damaging effects of flooding, if that cannot be practically achieved, the CRS does provide credit for efforts designed to mitigate damage to structures remaining within the flood hazard area. Flood Protection covers a myriad of options that, under the appropriate circumstances, may be initiated for credit within the CRS program.

Like most of the points in the CRS, a fair amount of recordkeeping must be done to insure credit for each structure seeking points under this family of activities. However, much of this recordkeeping is may already be required under the village's existing building code. The credit calculations for all three parts of this activity are highly integrated with each other, to the point that credits in 532c are a direct result of figures derived from 532a and 532b.

532a - Flood Protection Project Technique Used (TU_)

This group of activities covers a diverse set of physical improvements that may be undertaken by the village, other government entity, or private property owner that will decrease the flood hazard risk to individual properties. This set of activities is complex and paperwork intensive (as it relies on the documentation of each protective measure for each property). It also has a difficult method of determining points.

This activity can be a great source of points if the village has a plan in place to assist funding mitigation projects for individual properties through grants or other programs. However, there is also a great deal of tracking involved. It is recommended that the village become more familiar with other sections of the CRS before tackling this activity.

532b - Flood Protection Improvement (FPI)

Points are awarded for the enhancement of flood prevention measures. The points are calculated by the actual change in flood protection (e.g., from the 25-year flood to the 100-year flood) for a structure. Each building's improvement must be calculated separately.

532c – Protected Buildings (PB)

Like the other two sections of this activity, due to its complexity and presumed high cost of implementation, it is recommended that the village focus on other parts of CRS before beginning this task.

540 - Drainage System Maintenance

Perhaps one of the most fundamental things that the village can do to protect itself from minor flooding is to be sure that the drainage system in place is ready to receive and evacuate storm water from the populated areas of the village. This is an activity that the village is likely doing well, *today*.

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Due to the high visibility of the work need to fulfill this activity, 540 may be a good candidate for community involvement.

542a - Channel Debris Removal (CDR)

Channel Debris Removal is an example of one of the tasks that village is already carrying out on a regular basis. The key to earning the maximum possible points is a consistent program of monitoring and cleaning the village's creeks, ditches and other conveyance features, both on a regular schedule and in response to complaints and storms.

Based on the ownership and/or responsibility of maintenance of the components of the drainage system within the village, this may be a good activity to establish stronger relationships with the county or state, if they are in charge of particular reaches of ditches or other water management systems in the community. Those relationships will be critical as the village will be responsible for gathering the required data on their maintenance practices of all drainage facilities in the village, even those not owned or maintained by the village, if the village is to maximize credit in this activity.

CDR is another example of an activity that may have a heavy administrative or "creative" burden start up cost, but then falls into a simple "maintenance" mode after the initial mapping and information collection has been completed. However, CDR also offers valuable points with little year-over-year costs, once in place.

542b - Problem Site Maintenance (PSM)

What Problem Site Maintenance asks for and requires is that the village (and any other agencies responsible for drainage in the village) monitor and attend to those sites within the village's drainage network that are *known* to be problems, such as a ice jam-prone bridge or a culvert subject to woody material clogging. PSM requires that the village identify these sites and have a specific plan to deal with them on a more-than-once-a-year basis and following major storms *and* to address any pop-up issues quickly.

Again, while there will be a bit of "start-up" paper work cost with this task, once it is put in place, beyond the actual cleaning of the conveyance or site, the follow up recordkeeping should be minimal.

542c - Capital Improvement Plan (CIP)

If the village has a regular plan, both in an engineering and budget sense, for improvements to its drainage system, then this activity should be no problem to implement.

For credit under CIP, the village must identify problem sites; if possible, have an engineering analysis of the various sites considered for improvement; and have a regular yearly line item expenditure in the village's budget to fund these capital projects in the village's water management system. It should be noted however, that even without an engineering analysis of certain projects; the village could still get partial credit for its efforts to keep floodwaters in the channel.

542d - Stream Dumping Regulations (SDR)

As mentioned earlier, during the village's systematic review of its local code, ordinances, and laws, it should amend those portions of legislation to bring the village in line with the requirements of the CRS.

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As part of that effort, a straightforward revision may be needed to the village's anti-dumping law (if one is in effect) to strengthen it and if needed, to specifically prohibit the placing of brush, fill, and other debris that can cause blockages in the village's water conveyance system. The ordinance should name a village officer or staff member empowered to address complaints, and who will have the authority to enforce and take action when needed when violations are found or reported. A generic "anti-littering" ordinance is not sufficient to receive credit for this activity. Examples of anti-dumping statutes, in order of their strength are shown below.

The anti-dumping statute from a CRS Class 5 community (South Holland, Illinois):

The deliberate or unintentional disposal of grass clippings, brush, fill, trash, debris, obstructions or unwanted materials into the storm sewers or within or along banks of manmade or natural watercourses or in adjacent floodplain areas which may wash into streams and sewers is unlawful.

The code enforcement officer and other duly authorized employees of the village shall be permitted to enter upon all properties for the purpose of inspection, observation and measurement, in accordance with the provisions of this article.

Any person found to be violating the provisions of this paragraph shall be fined up to seven hundred fifty dollars (\$750.00) for each violation.

From the town of Amherst, New York (Class 7):

No person shall dump, drop, deposit or otherwise dispose of any garbage, rubbish, debris, yard waste, fill material or any other waste in any waterway, Town drainage system, receiver catch basin or manhole in the Town of Amherst, outside the Village of Williamsville.

The following example is from the town of North Kingstown, Rhode Island, a Class 9 CRS community:

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property reasonably free of trash, debris, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse.

Note that only the South Holland, Illinois, statute cites the penalty in the specific regulation.

Additional credit is available if the village publicizes its stream dumping regulations through community outreach (as explained in 332a – OP). In this case, "outreach" can be as simple as creating and posting signs at critical points near the village's drainage system.

542e - Storage Basin Maintenance (SBM)

While the requirements for this activity build on activity 452a, Stormwater Management Regulations (SMR), based on the complexity and recordkeeping needed for this task, the village may wish to defer attempting to meet the needs of this activity until other building blocks of the CRS are in place.

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542f - Coastal Erosion Protection Maintenance (EPM)

The village has no V or coastal A Zones, therefore this activity is not applicable to Schoharie.

610 - Warning and Response

This group of activities is focused on the benefit of having adequate warning time that can save lives and property before a flooding event. It is also concerned with the response of the village following a disaster and how post-disaster plans and activities can ease the suffering of the community.

While complex and very interlocked, the village has very likely undertaken many, if not most of the requirements described in this activity. Further discussion with and among village officials and staff will be needed to determine the village's readiness to take on this activity and to assess if the technology and infrastructure currently in place to assist in the warning of an impending flood meets CRS requirements. Please note that at least some credit must be earned in each of the following sub-tasks to receive any credit under 610: Flood Threat Recognition System (612a – FTR); Emergency Warning Dissemination (612b – EWD); Flood Response Operations (612c – FRO); and Critical Facilities Planning (612d – CFP).

612a - Flood Threat Recognition System (FTR)

Further discussions will be needed to determine to what extent the village has put in place a warning system to aid residents before a flood and what elements are in place as part of that warning system and if they meet CRS criteria.

612b - Emergency Warning Dissemination (EWD)

A review of the village's emergency warning systems will need to be conducted to determine if its various elements meet CRS requirements and if not, if the village wishes to revise its policies and procedures to make them CRS compliant.

612c - Flood Response Operations (FRO)

Many of the requirements outlined in this activity may have been fleshed out in the village's emergency response operations guidance. Plans such as when to close certain roads and bridges, evacuate schools and nursing homes, and other actions that are based on a particular threat level have likely been made, but should be reviewed and revised to assure that they align with CRS requirements for maximum credit.

612d - Critical Facilities Planning (CFP)

Specific information, such as contact and other planning data is needed to accomplish this activity, but like the prior three tasks, the village may have much of the information needed to meet CRS requirements in its emergency management plan already. The point of CFP is to put in to writing and practice a close working relationship between village emergency coordinators and staff and those in charge of critical facilities located in the village.

612e - StormReady Community (SRC)

To receive credit in this activity, the village must fulfill the requirements to join the National Weather Service's StormReady Community program. Schoharie County is a participating member in StormReady. It is recommended that the village reach out to Colleen Fullford, Schoharie County Emergency Management Coordinator and StormReady contact her by telephone at 518-295-2276 or via

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email at colleenfullford@co.schoharie.ny.us for assistance in this program. More information can also be found at stormready.noaa.gov/howto.htm.

612f - TsunamiReady Community (TRC)

This activity is only available for communities subject to tsunami wave action.

620 - Levees

A review of both the village's effective FIRM and the US Army Corps of Engineers' National Levee Database shows that there are no levees shown as providing protection to any area of the village; therefore the specifications needed for this activity will not be covered in this review.

630 - Dams

Due to the threat of dam failure from the Gilboa Reservoir, the village will be eligible to receive credit both from the state's dam safety program and through threat recognition, planning, warning, and response activities undertaken by the village. Much of the background data needed for this set of activities should be available from the state.

Like Activity 610, Warning and Response, several of the activities in this group are tied together and some credit must be earned in all of them to receive points in any of them. The activities joined are: Dam Failure Threat Recognition System (632b – DFR), Dam Failure Warning (632c – DFW), Dam Failure Response Operations (632d – DFO), and Dam Failure Critical Facilities Planning (632e – DCF).

As will become apparent, the activities in this group closely mirror those in Activity 610, and may be compiled at the same time. In addition, it may make sense to combine some outreach efforts for 610 and 630.

632a - State Dam Safety Program (SDS)

Because the village is not the owner or operator any dams that would, by their failure, endanger the village, when scoring this activity, the village is out of the mix. Points for SDS are entirely determined by how the state is rated by ISO.

632b - Dam Failure Threat Recognition System (DFR)

The goal of this activity is to put in place a system that gives the village's emergency managers as much time as possible to warn residents of impending flooding due to a dam breach or failure.

This is implemented by assuring that the dam operator knows under what conditions the village must be informed of danger of flooding due to dam failure and by testing the communication links between the dam and village. Additional credit is given if the village has a direct link to the dam's secondary dam failure threat recognition backup system.

632c – Dam Failure Warning (DFW)

The Dam Failure Warning credit is provided for the planning, preparation, and methods of dissemination of messages in the event of a dam failure.

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The timely and accurate dispersal of information in an emergency, especially a fast moving crisis such as a dam break, is critical in saving lives. For this reason, CRS seeks to reward those communities that prepare in advance an entire suite of needs and actions before the emergency. DFW requires that communities map out their likely needs during an emergency including equipment, staffing, time, communication methods, and other considerations, so that the community can be as prepared as possible *before* the event.

Like the Emergency Warning Dissemination requirement (612b), the village should review its written procedures to be sure that they cover and align with CRS requirements for maximum credit.

632c - Dam Failure Response Operations (DFR)

Much like Flood Response Operations (612c), Dam Failure Response Operations requires that the village specifically identify the needs that it will have in the event of a dam break. Credit is given for how detailed the plan is in outlining who is responsible for what actions in the village and identifying those in the village who would need extra help in a crisis, such as the elderly and other vulnerable populations.

Based on the village's location, it no doubt has a plan, but the plan should be reviewed to be ensure that it includes the requirements of this activity.

632d - Dam Failure Critical Facilities Planning (DCF)

Again, like 612d, Critical Facilities Planning, this activity seeks to prepare the village to know what infrastructure would be impacted by a dam breach.

Specific site information, such as contact and other planning data is needed to accomplish this activity, but like information needed for 612d, the village may have much of the information needed to meet CRS requirements in its dam failure plan already. Like planning for general flooding, the point of Dam Failure Critical Facilities Planning is to put in to writing and practice a close working relationship between emergency coordinators and staff and those in charge of critical facilities in the village.