

The NO ADVERSE IMPACT (NAI) TOOLKIT APPROACH TO COMMUNITY RATING SYSTEM POINT IMPROVEMENT IN ILLINOIS

By: Scott Cofoid, CFM, ISO/CRS Specialist and Terry Reuss Fell, FEMA Region V, Retired

Introduction:

The No Adverse Impact Toolkit provides an easy to understand discussion on why local governments should embrace a floodplain management program that is more comprehensive than the minimum National Flood Insurance Program (NFIP) requirements. It is an effective tool to use to encourage local elected officials to participate in the Community Rating System and to strive to accumulate more CRS points to qualify to a higher CRS class rating.

This paper presents examples of specific creditable activities under the CRS program that correspond to suggestions in the No Adverse Impact Toolkit for improving local floodplain management programs. This list is not all-inclusive – but identifies some CRS activities that could be used to supplement the Unified Minimum Credits for communities in the State of Illinois (see last page for the Uniform Credits). For more information please refer to the NAI Toolkit developed by the Association of State Floodplain Managers and available on their website at www.floods.org and the NFIP Community Rating System Coordinators Manual, FIA 15/2007, OMB No. 1660-0022 available at www.training.fema.gov/emiweb/CRS or by calling Scott Cofoid, ISO CRS Specialist at 815-220-1002.

The remainder of this paper is divided into three sections. The first simply identifies the major NAI Building Blocks with their basic, better, best (NAI) approach. The next section uses the NAI Building Blocks as an outline, adds smaller blocks lifted from the NAI toolkit and then identifies CRS activities that correspond to the building blocks from the toolkit. The third section lists the Uniform CRS credits that apply to all communities in the State of Illinois based on State laws and regulations and establishes a foundation of CRS points upon which to build. The CRS activity information in the second section is in italics. We have identified the CRS activity, the maximum CRS points for that activity, and the CRS manual page number on which more information can be found. CRS activities that rarely apply in Illinois (like coastal activities) are not included. The list of CRS activities is not complete. There are others that could well be used to support Building Block goals and there are many others that do not neatly fit with the NAI Building Blocks. But the hope is that we can encourage current and future CRS Coordinators to use the No Adverse Impact Toolkit as a resource when working with and talking to their elected officials, as it is easier to use and read than the CRS Coordinators Manual and use this paper to help link CRS activities with the common-sense approach used in the toolkit.

NAI BUILDING BLOCKS

Hazard Identification and Floodplain Mapping

- Basic – the FIRM – no CRS credit
- Better – Filling the gaps
- NAI approach – Higher mapping standards

Education and Outreach

- Basic – answer questions about FIRM and local FPM program
- Better – Outreach projects
- NAI –Education

Planning

- Basic – Land use Plans and Zoning
- Better – Plans that address flooding
- NAI – Multi-Objective Management (MOM) and “sustainability”

Regulations and Development Standards

- Basic – NFIP Regulations
- Better – Higher Regulatory Standards
- NAI – Enhanced Watershed Protection

Mitigation

- Basic – Structural flood control/flood insurance
- Better – Non-structural measures
- NAI – Master planning and monitoring

Infrastructure

- Basic – Response and Replacement (of damaged structures and facilities)
- Better – Protection measures and procedures
- NAI – Plans and alternatives

Emergency Services

- Basic – Generic emergency response plan
- Better – Flood preparedness
- NAI – Pre and post disaster preparedness

NAI BUILDING BLOCKS WITH EXAMPLES OF CORRESPONDING CRS ACTIVITIES

Hazard Identification and Floodplain Mapping

Basic: Use the Flood Insurance Rate Map (FIRM) – no CRS credit

Better: Filling the Data Gaps

1. Require developer to provide detailed flood data in Approx A Zones all developments regardless of size of A Zone (*CRS 410 (NS) New Study – up to 75 points – CRS Manual pg 410-7*);
2. Require developer to map floodplain for all drainage areas greater than a certain size (in C, D or X Zones) – (*CRS 410 (NS) New Study –up to 100 points – CRS Manual pg 410-7*);
3. Use a better base map;
4. Map and regulate other flood-related hazards - dam failure inundation, ice jam inundation, riverine erosion, levee failure inundation (*CRS 410- Additional Flood Data for Special Hazards (AFDSH) up to 50 points –(CRS Manual pg 410-21)*)

NAI Approach – Identify Flood Risk using Higher Standards

1. Use future condition hydrology to identify flood risk (*CRS 410 Higher Study Standard (HHS) – up to 160 points - CRS Manual pg 410-17*);
2. Prohibit increases in future flood discharges (*CRS 410 More Restrictive Floodway Standard (FWS) – up to 200 points – CRS Manual pg 410-18*). Note: Credit has already been granted under the state law – but additional points may be approved if a community adopts and regulates to a standard that exceeds the state requirement.
3. Prohibit any loss of storage or increase in velocity

Education and Outreach

Basic: Answer Questions about the FIRM and local FPM regulations – no CRS Credit

Better: Outreach Projects

1. Provide Map Information Service – publicize and invite public to use the service(*CRS 320 Map Information Service (MI) up to 140 points – CRS Manual 310-1*);
2. Provide map information on a community website
3. Outreach projects such as brochures, mailings, articles, video's, signs, presentations and the development of emergency action plans. (*CRS 330 provides for up to 380 points for 5 different outreach activities – CRS Manual 330 1-23 for information and examples*);
4. Provide flood protection information and advice (*CRS 350 Flood Protection Information - provides up to 102 points for 3 activities including Flood Protection Library (LIB), Locally Pertinent Documents (LPD) and Flood protection website (WEB) see CRS manual*

pages 350-1 to 8; and Activity 360 Flood Protection Assistance (FPA) – **up to 71 points** based upon the type of technical assistance provided – CRS Manual page 360-1).

Maintaining Elevation Certificates – is required and identified on the sheet with Uniform Credits for Illinois. CRS Activities that provide additional CRS points related to the Elevation Certificate include:

1. Activity 310 Maintaining elevation certificates in computer format (ECCF) – **up to 15 points** – CRS Manual page 310-8;
2. Posting Elevation Certificate data on a website (ECWS) – **up to 20 points** – CRS Manual page 310-9;
3. Off-site record storage (ORS) – **up to 10 points** – CRS Manual page 310-9

NAI: Education

1. Staff Training and Education – Certified Floodplain Manager Program (CFM) – (CRS 430 Staffing (STF) **up to 50 points** – see CRS Manual pg 430-20);

Planning

Basic – Land Use Planning & Zoning –

Better – Plans that address flooding

1. Floodplain management plans –(Floodplain Management Planning (FMP) – **up to 359 points** – CRS Manual page 510-5 to 25);
2. Special Area Management Plans – (coastal development issues)
3. Watershed Master Plans – **up to 225 points** – CRS Manual page 450-9 to 11);
4. Hazard Mitigation Plans and Pre-disaster Mitigation Plans (see #1, above).

NAI – Multi Objective Management & Sustainability – Land use economics

Regulations and Development Standards

Basic – NFIP Regulations – adopt and use model floodplain management ordinance.

Better – Use Higher Regulatory Standards

1. Freeboard (CRS 410 Freeboard (FBD) – **up to 300 points** –CRS Manual page 430-3);
2. Foundation Protection (CRS 410 – Foundation Protection (FDN) **up to 35 points** –CRS Manual page 430-7);
3. Limit enclosures (Enclosure Limits (ECL) – **up to 300 points** –CRS manual page 430-13);

4. Cumulative substantial improvements (*CRS Cumulative Substantial Improvement Rules (CSI)* – **up to 110 points** – *CRS Manual page 430-8*);
5. Lower threshold for substantial improvements (*CRS Lower Substantial Improvement Threshold (LSI)* – **up to 90 points** – *CRS Manual page 430-9*);
6. Regulate amount of fill in flood fringe (*Protection of floodplain storage capacity (PSC)* – **up to 80 points** – *CRS Manual page 430-11*);
7. Compensatory storage – see above.
8. Building codes (*Building Codes (BC)* – **up to 190 points** - *CRS Manual page 430-16*);
9. Special hazard regulations. These regulations would be in conjunction with identifying the special flood hazards such as dam failure inundation, ice jam inundation, riverine erosion, and levee failure inundation in the “Filling the Data Gaps” section.
10. Subdivision development standards (*Land Development Criteria (430LD)* – **up to 100 points** – *CRS Manual 430LD-4*);
11. Stormwater regulations
 - a. *Stormwater management regulations (SWR)* - **up to 225 points** – *CRS Manual page 450-5*);
 - b. *Using Design Storms (DS) in regulations* – **up to 90 points** – *CRS Manual page 450-7*;
 - c. *Public Maintenance of Stormwater facilities (PUB)* – **up to 110 points** – *CRS Manual page 450-8*;
 - d. *Watershed Master Plan (WMP)* **up to 225 points** – *CRS Manual 450-9*;
 - e. *Freeboard for new buildings in B,C,D, and X Zones (FRX)* – *to protect from local drainage problems* – **up to 150 points** – *CRS Manual page 450-12*;
 - f. *Erosion and Sedimentation Control Regulations (ESC)* – **up to 45 points** – *CRS manual page 450-13*; and
 - g. *Water Quality regulations (WQ)* – **up to 25 points** – *CRS Manual page 450-14*.
12. Public health & safety standards
13. *Protection of new Critical facilities (PCF)* – **up to 100 points** – *CRS manual page 430-10*

NAI - Enhanced Watershed Protection

1. Preserving beneficial floodplain functions (*Natural and beneficial functions regulations (NBR)* – **up to 40 points** – *CRS manual pg 430-11*);
2. Preserving important areas (setbacks and buffer zones)
3. Open space dedication

MITIGATION

Basic: Structural flood control and Flood Insurance

Better – Human Adjustment to Flooding

1. Acquisition and relocation of floodprone structures – (*Buildings acquired or relocated (bAR) CRS credit **up to 3,200 points** – CRS Manual page 520-2*);
2. Elevating existing structures
3. Dry Floodproofing
4. Wet floodproofing

*For 2, 3, and 4, above, CRS Flood Protection Activity 530 provides **up to 2,800 points** based upon the retrofitting or flood control technique used (CRS Manual page 530-1 to 20).*

Address repetitive losses – CRS Activities 501 (The Repetitive Loss List), 502 (Repetitive Loss Category), 502 (Repetitive Loss Area Outreach Project), and 504 (Repetitive Loss Mitigation Activities) and 505 (national Flood Insurance Reform Act of 1994 address these issues – CRS Manual pages 500-3 to 15).

NAI- Master Planning and Monitoring

Infrastructure

Basic – Response and Replacement

1. Repair roads, bridges, culverts and public utilities to avoid increases in flood damages and to reduce flood levels and erosion
2. Protect Critical Facilities

Better - Protection Measures and Procedures

1. Corrective measures to reduce future flood damages caused by roads, bridges, culverts and public utilities.
2. Inventory and audit of all flood prone public buildings
3. Flood insurance for all public buildings in mapped floodplain
4. Regular program of drainage system inspections and maintenance
 - a. *Activity 540 Channel and basin Debris removal (CDR) - **up to 300 points** – CRS Manual page 540-4;*
 - b. *Stream dumping regulations (SDR) - **up to 30 points** – CRS manual page 540-6;*
5. Protecting critical facilities (Activity 610 -Critical Facilities Planning (CFP) – **up to 50 points** – CRS Manual page 610-11);
6. Preparing emergency action plans

NAI- Plans and Alternatives

1. Public expenditures for Roads, bridges, public utilities, and public buildings should assure that major investments are protected from flooding and will protect citizenry.
2. Developing "greenway plans"
3. Parks and open space – (*Preserved Open Space (OS)* – **up to 725 points** – CRS Manual page 420-3 and *Natural and Beneficial functions (NB)* – **up to 100 points** – CRS manual page 420-9).

Emergency Services

Basic – Generic Response Plan

Better – Flood Preparedness Plans

1. Flood threat recognition system (Flood Warning Program Activity 610)
 - a. *Flood Threat Recognition system (FTR)* – **up to 40 points** – CRS Manual page 610-3);
 - b. *Emergency Warning Dissemination (EWD)* – **up to 60 points** – CRS manual pages 610-8;
 - c. *Other Response Efforts (ORE)* – **up to 50 points** – CRS Manual page 610-10;
 - d. *Critical Facilities Planning (CFP)* – **up to 50 points** – CRS manual page 610-11;
 - e. *StormReady Community (SRC)* – **up to 55 points** – CRS manual page 610-13.
2. Dam and levee failure Emergency Action Plans (EAPs)
 - a. *Levee Safety* – activities provide **up to 900 points** – CRS Manual pages 620-1 to 9;
 - b. *Dam Safety* – Activity 630 - *State Dam Safety program (SDS)* has already been credited as a Uniform credit. Activity 630 - *Dam Safety Emergency Action Plan (DFP)* – **up to 100 points** – CRS manual page 630-4;
3. Defined procedures to determine residential substantial damages;
4. Implement use of Increased Cost of Compliance (ICC) when appropriate.

NAI – Pre and Post Disaster Preparedness

1. Mitigation procedures in post disaster plan
2. Apply for Hazard Mitigation Grant Program (HMGP) and Flood Mitigation Assistance (FMA) and Pre-disaster Mitigation funds to implement identified mitigation projects.
3. Incorporate sustainability principles and multi-objective management principles into all local plans and initiatives.

Community Rating System (CRS) Uniform Minimum Credits for Illinois	NE IL	Downstate
CRS 310 (EC)- Elevation Certificates (a required CRS element)	56	56
CRS 340 (ODR1) – Flood Hazard Disclosure – show FP on all plats	5	5
CRS 340 (ODR2) – Flood Hazard Disclosure – seller’s disclosure forms	5	5
CRS 410 (FWS) – Floodway Standard	150	150
CRS 410 (CTP) - Cooperating Technical Partnership	10	10
CRS 420 (OS) – Open Space – Floodway	Up to: 725	
CRS 430 (BC) – Building Code – Plumbing Code	5	5
CRS 430 (SMS)- State Mandated requirements	25	15.5
CRS 630 (SDS) State Dam Safety program	57	57
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	1038	303.5
Without any Open Space	313	

NE IL = Cook, DuPage, Kane, Lake, McHenry, and Will Counties

For more information contact:

Scott Cofoid, CFM

ISO/CRS Specialist

1126 Schuyler Street

Peru, IL 61354

Phone/Fax: (815) 220-1002