



# Community Resilience Action Network of Erie (CRANE)

## Strategic Plan 2020-2025

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### **Executive Summary**

The Community Resilience Action Network of Erie (CRANE) was started as a partnership to increase climate literacy in the Erie area by focusing on annual summits and workshops. Since then, it has become clear that what Erie needs is a roadmap to climate resilience; engaging with and educating residents is only one piece of the puzzle. This strategic plan offers a framework to allow CRANE to become the resource for municipalities, local businesses, and residents on best management practices to address the impacts of climate change.

The overarching goal is to create a climate action plan for Erie County over the next five years which will make the Erie community more educated, resilient and vibrant. Erie could become a future model for other communities on best management practices for climate resilience. The following strategic plan outlines the five main objectives and focus areas of CRANE over the next five years, which include:

- 1) ***Promote and monitor climate literacy in the Erie region, over next five years:*** Climate literacy is still an important component to making any progress on climate action, as without a basic understanding of climate change and the local impacts, it becomes difficult to have any conversations surrounding changes in local practices. Continuing the annual summits and workshops, as well as developing and maintaining an active online presence, will be important, but also broadening those we engage with to include the municipal and elected officials that make important decisions will be crucial for progress.

- 2) **Collaborate and coordinate with local partners and organizations in order to broaden impact and share resources:**  
There are many successful and talented local organizations in Erie County, and CRANE will need to partner with them in order to achieve its goals. These partnerships can be in the form of additional core members of CRANE, or as affiliate partnerships that are specific to projects. Through collaboration and coordination with other groups, it allows CRANE to take advantage of local experts, share resources, and fill gaps in capacity, in order to support CRANE's mission and goals.
- 3) **Identify and conduct research to support the objectives of CRANE:** In addition to project partnerships, research partnerships will be important as preparation for work on a climate action strategy. With a wealth of universities in Erie County, CRANE can offer real world projects for students to assist with, giving them experience while assisting CRANE meet its needs. Many of the tasks already identified will need to be completed before work can begin or progress on a climate action strategy.
- 4) **Develop a Climate Action Strategy for Erie Region:** A key CRANE objective is to develop a climate action strategy that would address critical vulnerabilities within the community, and bring together stakeholders and partners to develop feasible and effective solutions to minimize the impacts of climate change.
- 5) **Sustain CRANE by identifying funding opportunities, leveraging support, and evaluating success:** The sustainability of CRANE itself is crucial to allowing completion of the objectives noted above and continuing local work on climate change issues and community resilience. There are currently no other local organizations focusing on climate change, and therefore, identifying funding sources, as well as engaging volunteers and partner organizations is a necessity. Equally important will be tracking and evaluating the impact of CRANE and its work.

This strategic action plan is fluid and meant to change over the course of CRANE work. As new opportunities arise, or as needs change, this document can and will be modified to reflect those changes.

## **History/Intro**

The Community Resilience Action Network of Erie (CRANE) is an alliance of several organizations in the region that have a commitment to developing a climate-conscious community through education, coordination and implementation of projects that address climate change and build a resilient community.

Communities are increasingly finding it more and more difficult to keep up with both the immediate effects of Mother Nature and the slow build-up of long-term changes to weather patterns. Resilient communities are ones that are prepared to react to disasters in an organized and pre-emptive manner and continue to grow and develop with the long-term changes in mind.

Our community is blessed with a mild climate and a lack of acute extreme weather, aside from lake effect snow. Over the last several years however, there has been an increase in extreme temperatures, severe rain events resulting in flooding, and dangerous OZONE days. Individual agencies and entities that deal with the effects of these events are seeing the effects of climate change, but as a community we are not looking at these events in a collective manner. There is a lack of connectivity within economic development, housing, and community facilitates with the long-term effects of climate change.

Currently in our region there is no champion agency or governmental unit spearheading Erie County to becoming a climate ready community. Nor does this group believe that one entity can or should do so. The purpose of this group is to begin the discussions among the community and coordinate efforts for addressing the regional effects of climate change.

## **Core Group includes as of June 2020**

PA Sea Grant, Green Building Alliance, Regional Science Consortium, PA DEP, DCNR, the City of Erie and the County of Erie.

## **Mission Statement**

*“Engage the community using education and collaboration to identify climate vulnerabilities and implement proactive responses that preserve a vibrant and resilient region.”*

**Action Plan/Timeline**

**Objective 1: Promote climate literacy in the Erie region, over next five years**

Background: A foundational element to our entire effort to build resiliency is an informed and engaged public. This objective provides for public engagement with an emphasis on local decision makers to share both the latest information and data regarding local impacts of climate change as well as local efforts already underway the help build a more resilient community. A key part of this effort is to use the internet and social media to provide information to the public.

**Action 1-A: Engage the public and stakeholders with information and education on climate impacts and actions**

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b># of Events</b>	<b>Performance Evaluation</b>	
<p>1-A-1: Host community events and educational opportunities on topics related to climate adaptation and resilience, including summits, workshops, film screenings, presentations, and panel discussions.</p> <p>Engage municipal leaders, decision makers, public officials, and elected officials by convening Townhall style meetings and offering resilience related webinars</p>	Annual, On-going	CRANE	Number of events (2-3)	<p>Penn State Behrend Panel Discussion (~50); Participation in Green Connections Documentary; CRANE presentation at 2030 mtg (25); CRANE/GLISA presentation at PA LEEF meeting (~50 people); CRANE/GLISA presentation at Social Coast (30); Penn State Behrend class presentation on CRANE and GLISA (12)</p>	
			Host minimum of 2-3 engagement opportunities		
			Number of people reached (at least 15)		~167
			Number of outreach materials published		CRANE story map; new web pages on CRANE website on water levels and temperature
			Number of educational materials produced or sessions held.	Part of GLISA project; potential educational video on water levels and engagement sessions on water levels with DCNR	
1-A-2: Establish a baseline of climate literacy level and monitor impact due to education	Establish baseline on-going	CRANE	Achieve improvement to climate literacy (50% improvement of participants?)	Engage IU5 to develop approach; conduct surveys before and after events; # of citizen science projects.	

Action 1-B: Providing web-based access to accurate, up-to-date and local information regarding climate change impacts in Erie

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
1-B-1: Update and maintain the CRANE website (pacrane.org)	Annual, On-going	CRANE	Minimum of number of views/hits per year or every 6 months.	2018 numbers: 2019 numbers:
1-B-2: Use social media platforms such as Facebook and Twitter to interact with the general public and keep them informed of upcoming news and events	Annual, On-going	CRANE	Goal to gain 200 number of followers by 2022.	2018 numbers: 2019 numbers: As of 6/2020:
			Through social media platform, host minimum of one competition to increase local climate change projects shared	
1-B-3: Maintain an online, interactive story map showcasing all local mitigation and adaptation projects	Annual, On-going	CRANE	Minimum of five new stories/projects per year	<a href="#">Resilience Story map</a> ; <a href="#">new water levels page</a> ; <a href="#">new/updated temperature page</a> ; <a href="#">Erie's perceptions on climate change page</a>

**Objective 2: Collaborate and coordinate with local partners and organizations in order to broaden impact and share resources.**

*Background:* Important to CRANE’s success is multiple partnerships with local community organizations. This objective is to identify potential partners and what they can offer to support CRANE’s goals, specifically how they fill gaps in expertise, or capacity, in order to support CRANE’s mission. The action items below indicate the different types of partnerships and how they fit into CRANE’s work.

Action 2-A: Continue to build CRANE Core Group Partnerships

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
2-A-1: Identify Partners that can full fill gaps in current capacity in the Core membership of CRANE	On-going	CRANE	Add an 1-3 additional core members based on identified gaps (over five years)	2018/2019 added PA DEP as a core partner 2019, added City of Erie as a core partner; <a href="#">Added DCNR as a core partner</a>

Action 2-B: Build partnerships with other local organizations and groups outside of CRANE’s Core members

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
2-B-1: Identify organizations that can support CRANE outside its current mission as affiliate members, for example, partnering with PLEWA partners, to fulfill an advocacy role that is not part of CRANE’s mission.	On-going	CRANE	Engage with 3-5 individuals or organizations over next five years to assist with specific CRANE tasks	2018 Partnerships 2019 Partnerships: Climate Reality and notification of Story Mapping; 2030 District asst. with announcement of Story Mapping; <a href="#">Erie County Department of Health</a> ; 2020 Partnerships: <a href="#">PLEWA</a> , <a href="#">LERC</a> , <a href="#">PennFuture</a>

Actions 2-C: Create buy-in from local stakeholders and decision makers on connections with climate change action strategies

Tasks	Target Date	Lead	Performance Measure	Performance Evaluation
2-C-1: Provide resources, technical assistance, and research to decision makers to support the implementation of climate change action strategies	Late 2019 (with launch of CRI tool) On-going	CRANE	Create meaningful partnerships with at least 2-3 municipalities (County of Erie, City of Erie, Millcreek Twp)	2019: involvement of City of Erie as partner; Partnerships will form with GLISA project; Bayfront Maritime Museum
2-C-2: Identify local opportunities where climate change efforts can complement current planning efforts, e.i. comprehensive planning, zoning changes, stormwater management planning, etc	2020, with reveal of CRI results On-going	CRANE	Partner with stakeholders on 1-3 specific projects or action strategies over next five years	Year 2 of GLISA project

**Objective 3: Identify and conduct research to support the objectives of CRANE**

Background: Research must be conducted on several components important to the climate action strategies to determine best management practices that will be helpful in prioritizing strategies. These action items below must be completed in order to move forward Objective 4, as it relates to the climate action strategies.

Action 3-A: Implement an Ecosystems services valuation process for the Erie region to help place a value on local ecosystems to better understand and prioritize climate change impacts

Tasks	Target Date	Lead	Performance Measure	Performance Evaluation
3-A-1: Identify universities or research organizations to partner (subcommittee of professors/universities)	2018		Partner with a research organization	2018: Partner with Edinboro University and Intern 2019: Partner with summer Intern?
3-A-2: Conduct a literature review ( <i>existing methods?</i> ) of valuation methodologies for ecosystem services	2018-2019		Completed Literature Review	Started in 2018, continued in 2019? Amber picked up 2020.

3-A-3: Identify and list ecosystem services in the Erie region (in tandem with A1&2)	2018-2019		List of Ecosystem services in Erie region	
3-A-4: Compile Best Management Practices and recommendations for valuing ecosystem services	2018-2019		BMPs for placing value on ecosystem services	

Action 3-B: Develop a method of determining the economic costs and benefits to mitigation and or adaptation strategies to help prioritize future projects.

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
3-B-1: Identify universities or research organizations to partner	2021		Partner with a research organization	2018: Partner with Edinboro University and Intern
3-B-2: Conduct a literature review of economic assessment methods for determining the cost of climate change impacts	2021		Completed Literature Review	Started in 2018;
3-B-3: Apply the best methods of assessing the costs and benefits to local impacts	2021		Compiled BMPs	

Action 3-C: Develop a method of measuring climate literacy of the Erie community

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
3-C-1: Identify universities or research organizations to partner	2021		Partner with a research organization	Limited by funding, staffing, capacity.
3-C-2: Conduct a literature review of methods for measuring climate literacy	2021-2022		Completed Literature Review	Limited by funding, staffing, capacity.
3-C-3: Apply the best methods of methods for measuring climate literacy to determine a baseline level for Erie County	2021-2022		Compiled BMPs	Limited by funding, staffing, capacity.

Action 3-D: Continue to address additional research needs as they arise based on climate action planning work. Tasks to be identified as needed

**Objective 4: Develop a Climate Action Strategy for Erie Region**

Background: A key CRANE objective is to develop a climate action strategy that would address critical vulnerabilities within the community, and bring together stakeholders and partners to develop feasible and effective solutions to minimize the impacts of climate change. The action items below describe the process CRANE plans to take, starting with customizing a vulnerability assessment tool for Erie; implementing the assessment to provide a vulnerability “score” to each sectors of the community; developing action strategies to build resilience in Erie’s most vulnerable areas; and using economic data to prioritize a timeline for action.

Action 4-A: Develop an assessment tool to identify and prioritize local vulnerabilities in Erie

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
4-A-1: Research, review, and consult with experts on weather indicators that would help determine a baseline for use in the assessment tool.	2018	NY Sea Grant	Baseline data exists for the various weather scenarios outlined in the vulnerability assessment tool.	Baseline data exists within work that NY Sea Grant has developed
4-A-2: Determine which vulnerability assessments tool, such as the Gulf Coast Community Resilience Index, and the Great Lakes Assessment, to be used for Erie.	2020-2021	CRANE; NY Sea Grant; GL SG Network	Assessment tool is developed based on customization of existing tools	
4-A-3: Engage local partnerships and organizations in the customization and development of the assessment tool.	2020-2021	CRANE; NY Sea Grant; GL Sea Grant Network	At least two regional or local partners are identified to customize and finalize the vulnerability assessment for use in Erie.	

Action 4-B: Conduct the vulnerability assessment with local partners

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
4-B-1: Identify local organizations, stakeholders, partners and other key players from each sector of Erie to take part in conducting the vulnerability assessment	2020	CRANE	Enough partners are identified to successfully complete each section of the vulnerability assessment	Funding received 2019 from Erie Insurance (\$5,000)
4-B-2: Hold working groups, phone calls, and face to face meetings with community members to help them fill out the assessment checklist	2021	CRANE	Priority vulnerabilities to climate impacts are identified for Erie	
			Gaps in data related to local impacts are identified	

Action 4-C: Create a repository of existing adaptation strategies to use as a guide for the local community

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
4-C-1: Identify university students or classes, and community organizations to assist with conducting a review of vulnerability action strategies.	2021-2022	CRANE	Have at least one research partnership established to complete this task	
4-C-2: Conduct a review of existing BMPs for the specific vulnerabilities identified by the vulnerability assessment	2021	University Partners	Create a list of BMPs for each of the identified vulnerability priorities from the vulnerability assessment	
4-C-3: Compile BMPs and related research into a resource document available to the local community	2021-2022	University Partners	Combine all BMPs and reviews in one document for use in determining strategies based in the results of the vulnerability assessment	

Action 4-D: Identify and prioritize action strategy recommendations for Erie

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
4-D-1: Conduct Stakeholder meeting to review the results of the literature and BMPs document identified in Objective 4-C and narrow down the list to include only strategies that are feasible for Erie	2021	CRANE	Conduct at least 2 stakeholder meetings that result in a narrow list of potential strategies targeting the priority vulnerabilities area	
4-D-2: Using the results of ecosystem services evaluation and economic impact methodology, assign economic values to the list of Erie-specific possible strategies	2021	CRANE and University partners	List of Erie strategies is assigned economic values	
4-D-3: Reconvene stakeholder groups to prioritize Erie specific strategies based on economic values and feasibility	2021	CRANE	List of top three to five action strategy recommendations for each sector	

Action 4-E: Implement the prioritized action strategies

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
4-E-1: Develop summary documents, brochures, and other outreach materials to inform the community about the results of the vulnerability assessment and the climate action strategy. ex Cleveland or Albany Climate Action Plan executive summaries	2020-2021	CRANE	A minimum of two public outreach materials are developed and the CRANE website is updated with the results of the Climate Action Strategy	
4-E-2: Secure funding to assist the community in implementing the projects and strategies recommended through the climate action strategy	2020	CRANE	Funding is available through secured grants for use in implementing climate action strategies	
4-E-3: Use information learned through this process to inform the future development of local regulation changes, including zoning, development, building codes, or other	2020-2023,	CRANE	Partner with stakeholders on 1-3 specific projects or action strategies over next five years	

**Objective 5: Sustain CRANE by identifying funding opportunities, leveraging support, and evaluating success**

Background: This objective is more inward looking and seeks to ensure the long term sustainability of CRANE itself. Clearly cultivating funding opportunities and capitalizing on the use of volunteer and/or internship efforts are key elements of keeping CRANE a vital and viable organization. Equally important will be tracking and evaluating the impact the efforts described in this document have on the broader community and to use that information to refine CRANE’s future efforts.

Action 5-A: Identify funding opportunities to support the administration of CRANE

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
5-A-1: Research funding opportunities available for climate change strategies	On-going		Creating a parking lot document of all potential funding opportunities that include funding organization, eligibility, general timeframe of grant rounds, information regarding what funding will cover including administration costs, project implementation, food for events, etc	

Action 5-B: Identify opportunities for volunteers and internships through university or community organization partnerships

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
5-B-1: Create a line of communication with appropriate departments within each local university for advertising of internship opportunities	End 2018	Internship Sub-Committee	Compile list of contact information for each specific person within each university that deals with internships, and include all details on requirements for each university to accept internship hours.	
5-B-2: Creating database of potential internship opportunities	Initial internships start 2018; On-going	Internship Sub-committee	Creating a list of internship opportunities and post to CRANE website	

Action 5-C: Develop methods for tracking, evaluating and measuring impacts on the community due to activities or actions of CRANE core members

<b>Tasks</b>	<b>Target Date</b>	<b>Lead</b>	<b>Performance Measure</b>	<b>Performance Evaluation</b>
5-C-1: Conduct a internal brainstorming session to review best practices to evaluate CRANE projects or actions			Compile list of BMP for evaluating impacts of CRANE projects or actions	
5-C-2: Review current methods of evaluating the impacts on attendees of summit			Evaluation tool is developed	

**CRANE Board approved on: November 18, 2020**

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