

Framework Document to Improve the Environmental Health of Vulnerable Communities across North America

CEC's Air Quality and Pollutant Releases Program

JPAC Workshop, Mérida, México
December 13-14, 2012



cec.org



Capacity Building to Improve the Environmental Health of Vulnerable Communities in North America

Objective:

- ✓ Assist Communities in the identification of potential health risks posed by environmental contamination, and actions to mitigate them

Approach:

- ✓ Development of **Framework document** for building capacity among communities throughout North America (focus on vulnerable populations such as children and indigenous communities)
- ✓ Tri-national collaboration with stakeholders, building on existing tools and resources (e.g., Community Action for Renewed Environment Resource Guide, CEC's Taking Stock Online, SMOC monitoring initiatives, AirNow, etc.)



Capacity Building to Improve the Environmental Health of Vulnerable Communities in North America

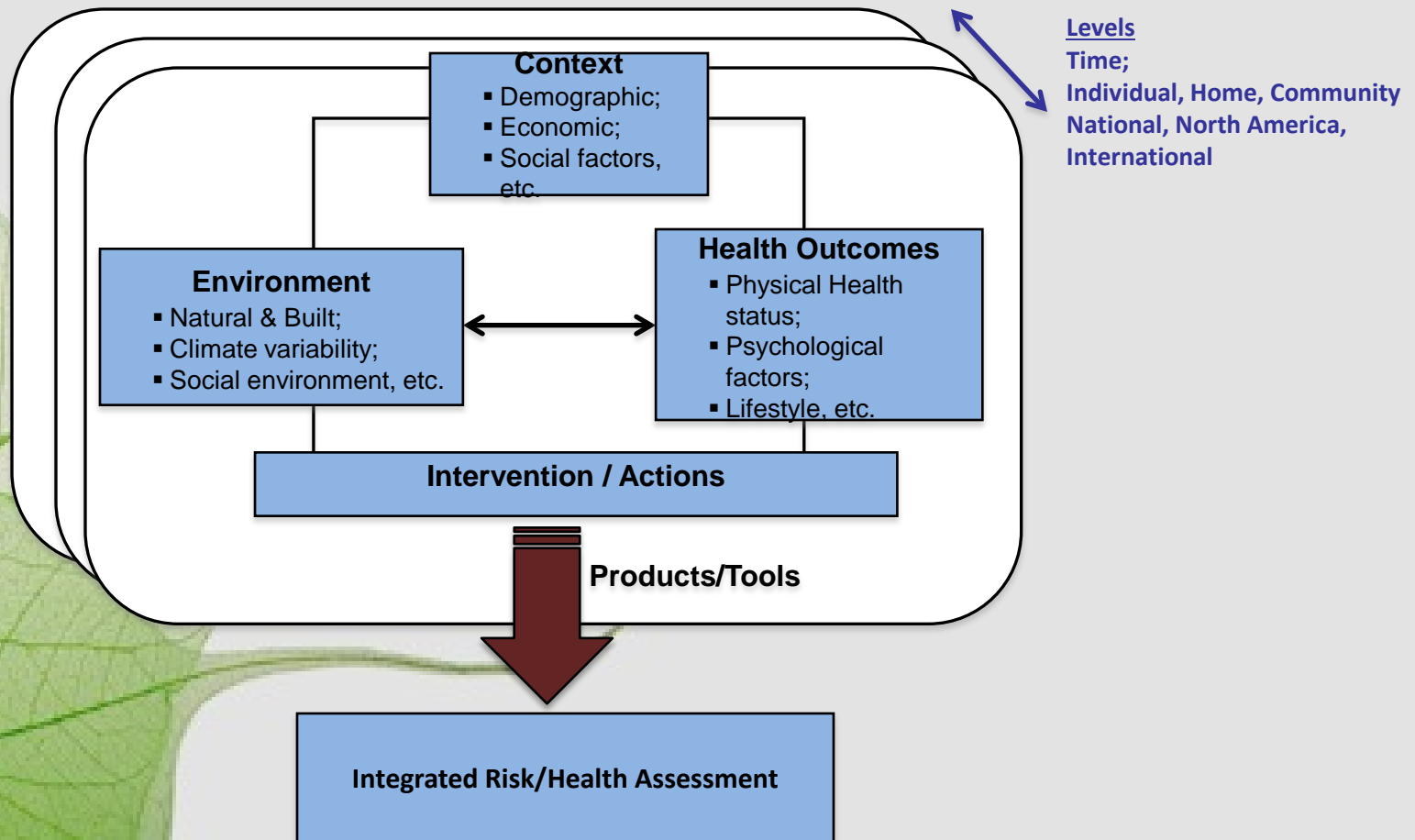
Annual Environmental Burden of Disease (selected health outcomes)

Country	Chronic Obstructive Pulmonary Disease (COPD)	Asthma	Cardiovascular diseases	Cancer	In-utero exposure and congenital affliction
Canada	714,000 affected ¹ 9773 deaths 256,461 hospitalizations EAF*: 10-30% ²	2.7 million affected ¹ 288 deaths EAF: 26-53% ²	1.3 million affected ¹ 72,743 deaths 447,218 hospitalizations EAF: 7-23% ²	850,000 affected ³ 68,322 deaths 215,493 hospitalizations EAF: 5-15% ⁴ (12-29% ²)	1700 infants deaths ⁴ 25,000 low birth weight 1900 stillbirths 6400-9600 serious congenital anomalies EAF: 2-10% ²
Mexico	5-10 million affected ⁵ 17,000 deaths 128,960 hospitalizations EAF (COPD): 37-47% ² EAF (Asthma): 26-53% ²		15.5 million affected ² 92,679 deaths 249,239 hospitalizations EAF:7-23% ²	86,554 deaths ⁶ 296,877 hospitalizations ⁵ EAF:12-29% ²	8946 deaths ⁵ 183,095 low birth weight 65,584 hospitalizations EAF: 3-25% ²
United States	COPD: 5-10% of population ⁷ Asthma: 26 million (7 million children) ^{7,8} 3447 deaths 456,000 hospitalizations EAF: 10-35% ⁹		81 million affected ⁷ 599,413 deaths 4 million hospitalizations EAF: 7-23% ²	19.4 million adults affected ^{9,10,11} 567,628 deaths 1.3 million hospitalizations EAF: 2-10% ⁹ (12-29% ²)	9883 deaths (5.319 < 1yo) 336,747 low birth weight 25,894 stillbirths ¹² EAF : 2-10% ²

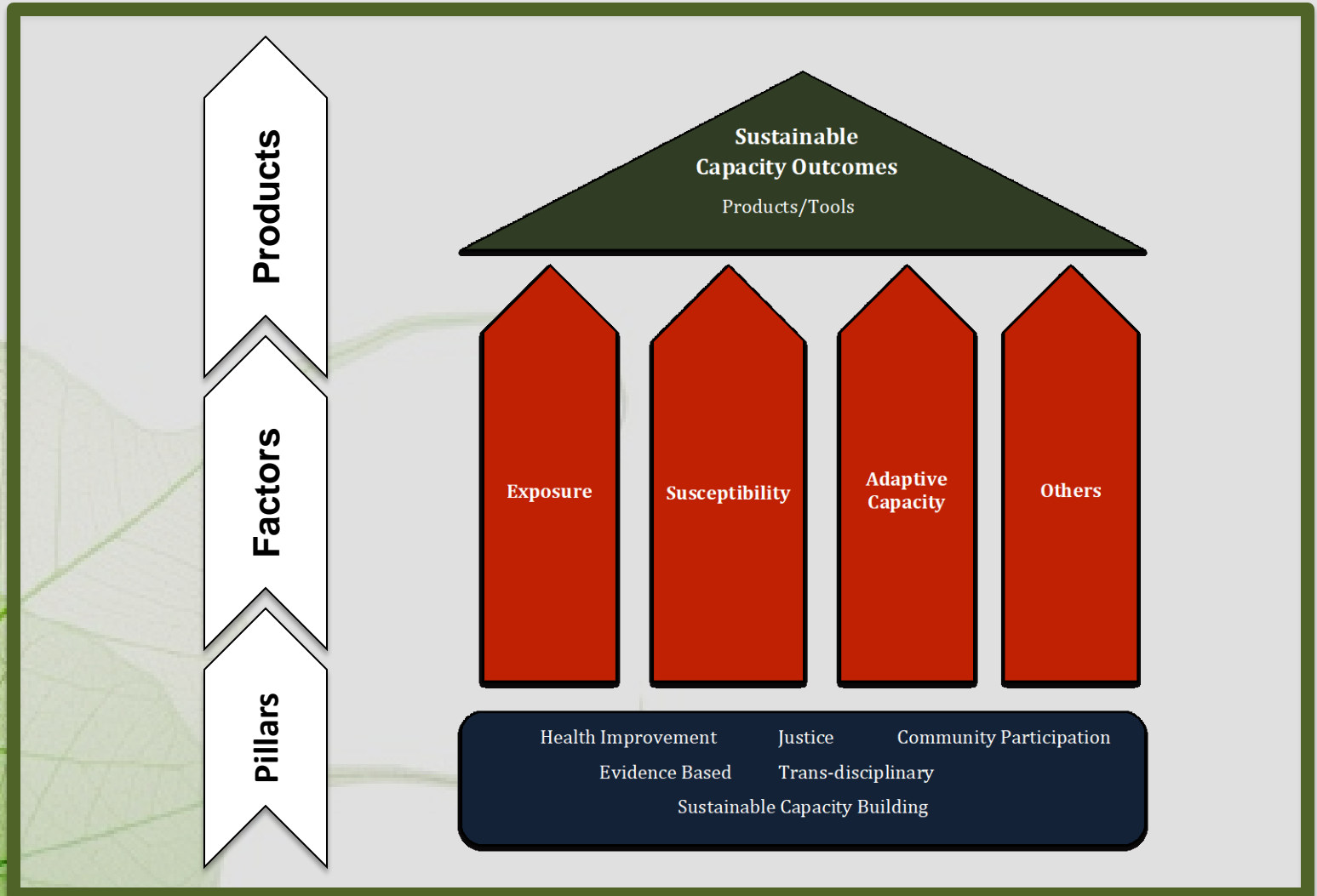
*EAF: Environmentally Attributable Factor

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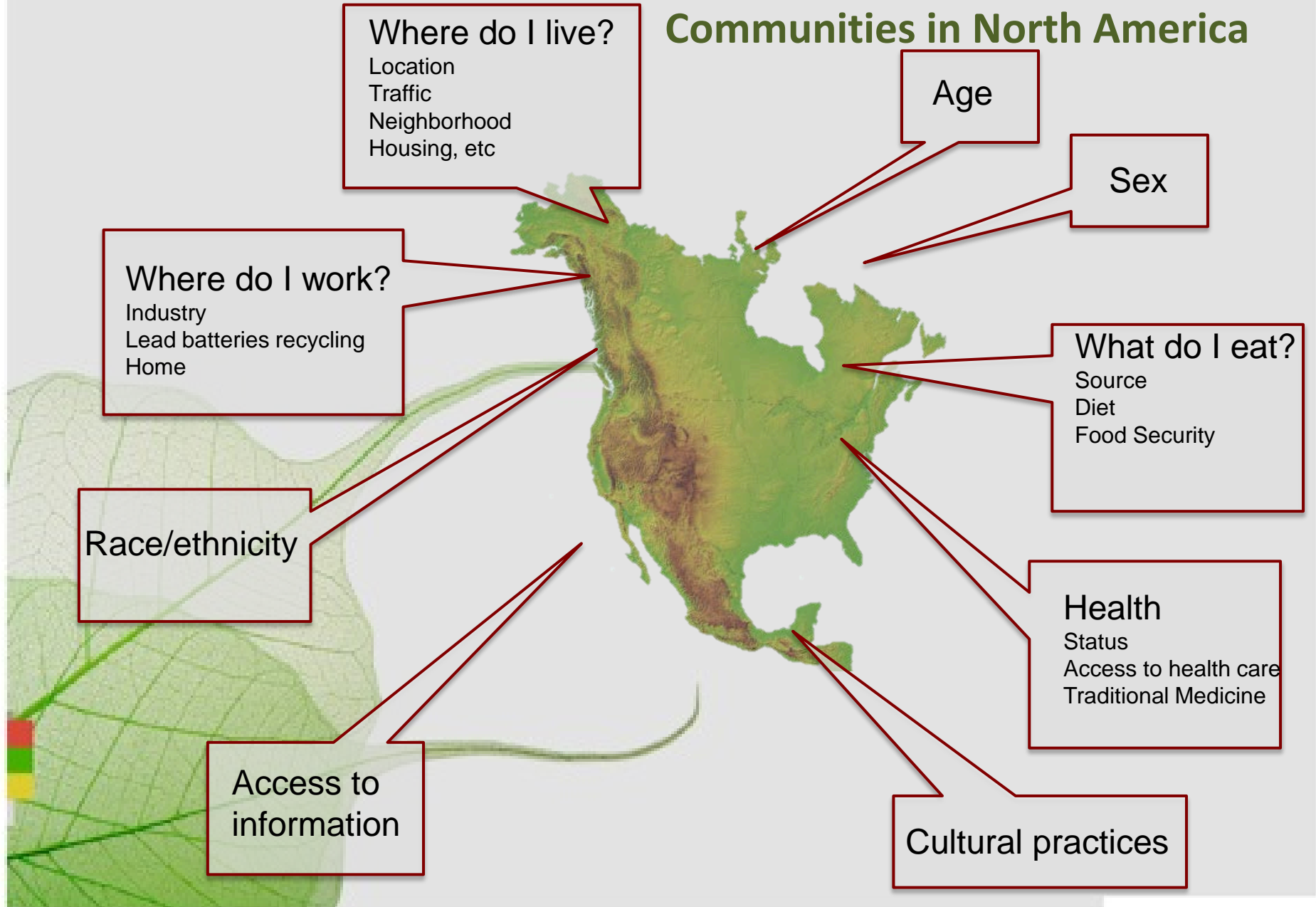
Framework to Improve the Environmental Health in North America



Framework to Improve the Environmental Health of Vulnerable Communities in North America



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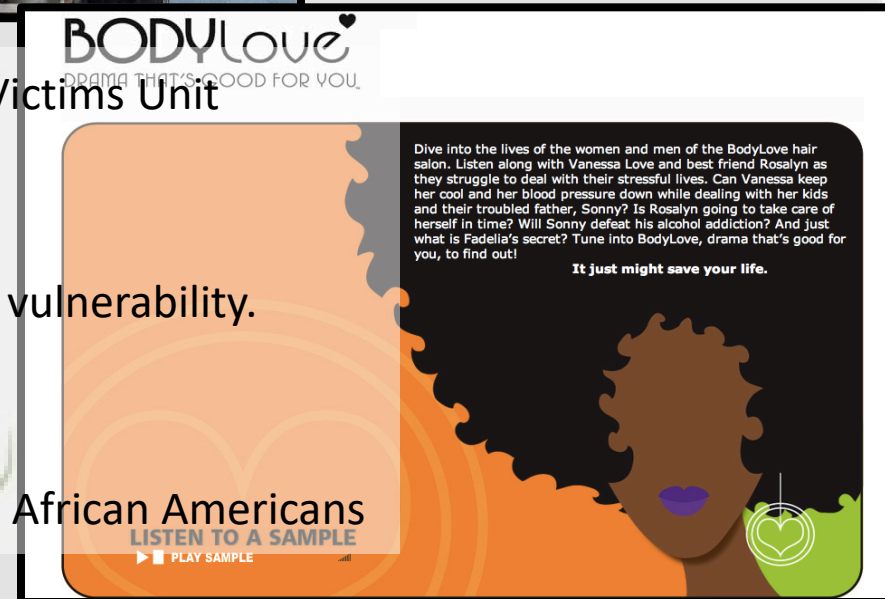


Framework: Communications Approaches and Strategies



- TV show Fall 2006 – Law and Order: Special Victims Unit
Episode: Loophole
Audience 13.4 million U.S. viewers
Topic: Residential use of pesticides and children vulnerability.

- BodyLove:
Radio soap-opera
Reduce environmental health disparities among African Americans



Source: Kennedy M.G. et al. 2011. Effects of a television drama about Environmental Exposure to Toxic Substances Public Health Reports 126:150-159.
Chen N. et al. 2009. BodyLove: The Impact of Targeted Radio Educational Entertainment on Health Knowledge, Attitudes and Behavior among African-Americans. Cases in Public Health Communication & Marketing 3:92-113

Framework: Communications Approaches and Strategies

Creating Healthy Environments for Kids

Low cost tips for reducing children's exposures to chemicals at home:

Tools: video, brochure and individuals cards (in English, French, Spanish, Tagalog, Punjabi, Chinese and Arabic)



Clean floors often with a damp mop or good quality vacuum.

Take off shoes at the door.

Use a damp cloth when dusting.

www.bustthatdust.ca



Especially when pregnant, avoid fish that are high in mercury, such as fresh tuna, shark and swordfish.

If you eat canned tuna, choose "light" over "white" (albacore). Light tuna contains less mercury.

If you fish in local waters, check fish advisories to make sure it is safe to eat. Questions? Ask your public health department.

Look for low-mercury fish, such as Atlantic mackerel, herring, rainbow trout, wild or canned salmon, and tilapia.

www.dishsaferfish.ca



Paint used in older homes likely contains lead, which can harm the developing brain. Cover old painted surfaces with new paint instead of sanding or scraping.

Avoid being around renovations if you are pregnant. Keep children away too.

Clean up dust completely after the work is done.

Keep windows open until all chemical smells are gone.

www.renovate-right.ca



Scrub sinks and tubs with baking soda.

Choose fragrance-free laundry and cleaning products.

Mix one cup vinegar in a bucket of warm water and use to mop floors, wipe counters and wash windows.

Avoid "plug-ins" and other types of air "fresheners."

Clean up dust completely after the work is done.

www.gogreenwhenyouclean.ca

Source: Canadian Partnership for Children's health & environment (www.healthyenvironmentforkids.ca)

Framework: Communications Approaches and Strategies

Huicholes y Plaguicidas: video (12 Mexican native languages, English, Spanish, French and German), Radio and written reports.



“Right to be informed, prevention, alternatives, training and technical assistance”

Source: Huicholes y Plaguicidas
(www.hypinfo.org)

Framework: Communications Approaches and Strategies

Traditional Knowledge

"We don't just look after our relatives who have two legs.

We also want to look after our relatives who have feathers and fins. And who have roots," member of the Tsleil-Waututh nation.



Framework: Communications Approaches and Strategies – Tool Developers part of the Community

Contaminants are accumulated and Biomagnified in the web food:

Pregnant women and women of childbearing age:

- Limit consumption of marine mammals
- Choose country food

It can lead to: Substantial stress (psychological and social) within and among families (e.g. disagreements, fragmentation)

It is not just about food, it is a traditional way of life



Source: Inuit Tapiriit Kanatami (ITK)

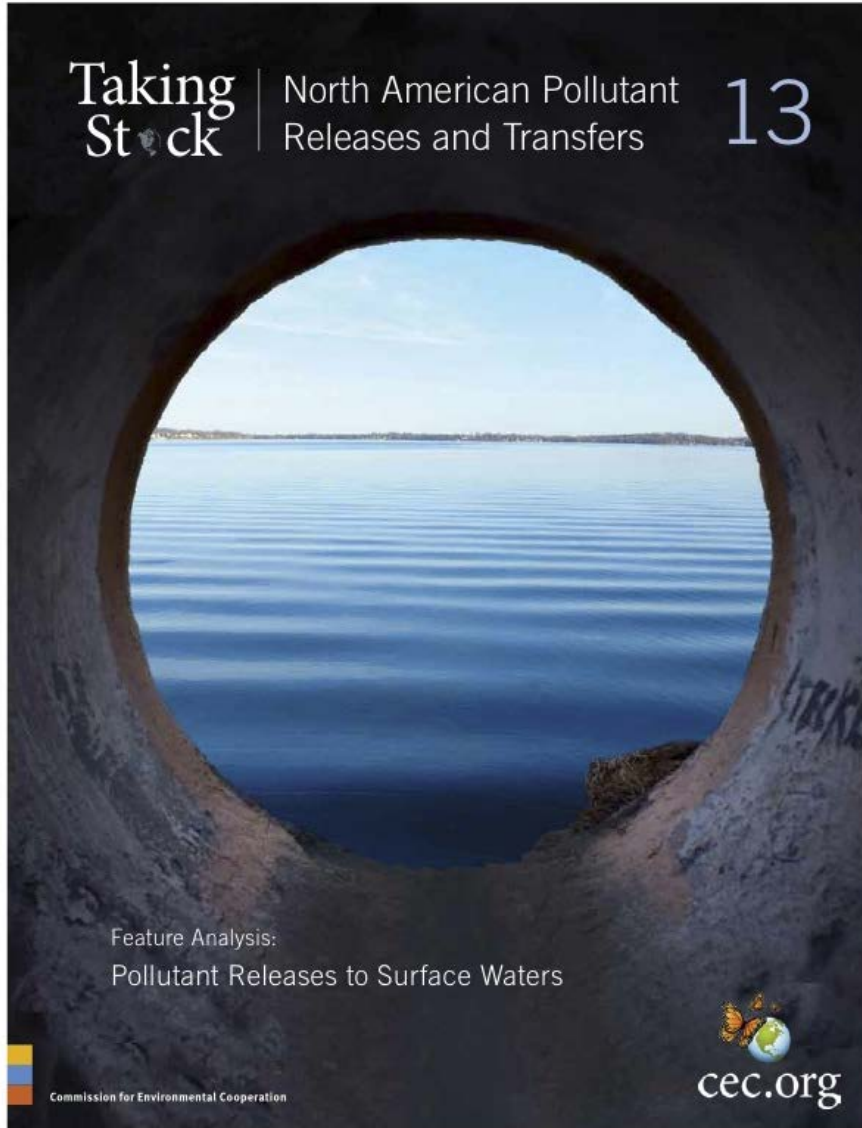
Framework: Communications Approaches and Strategies

The information provided in the framework document is to be used to produce adapted tools for targeted individuals or communities.

“ Knowing is Not Enough; *we must* Apply.
Willing is Not Enough; *we must* Do. ”

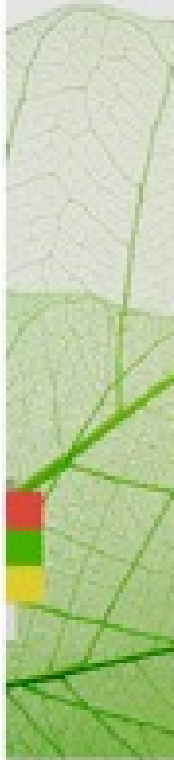
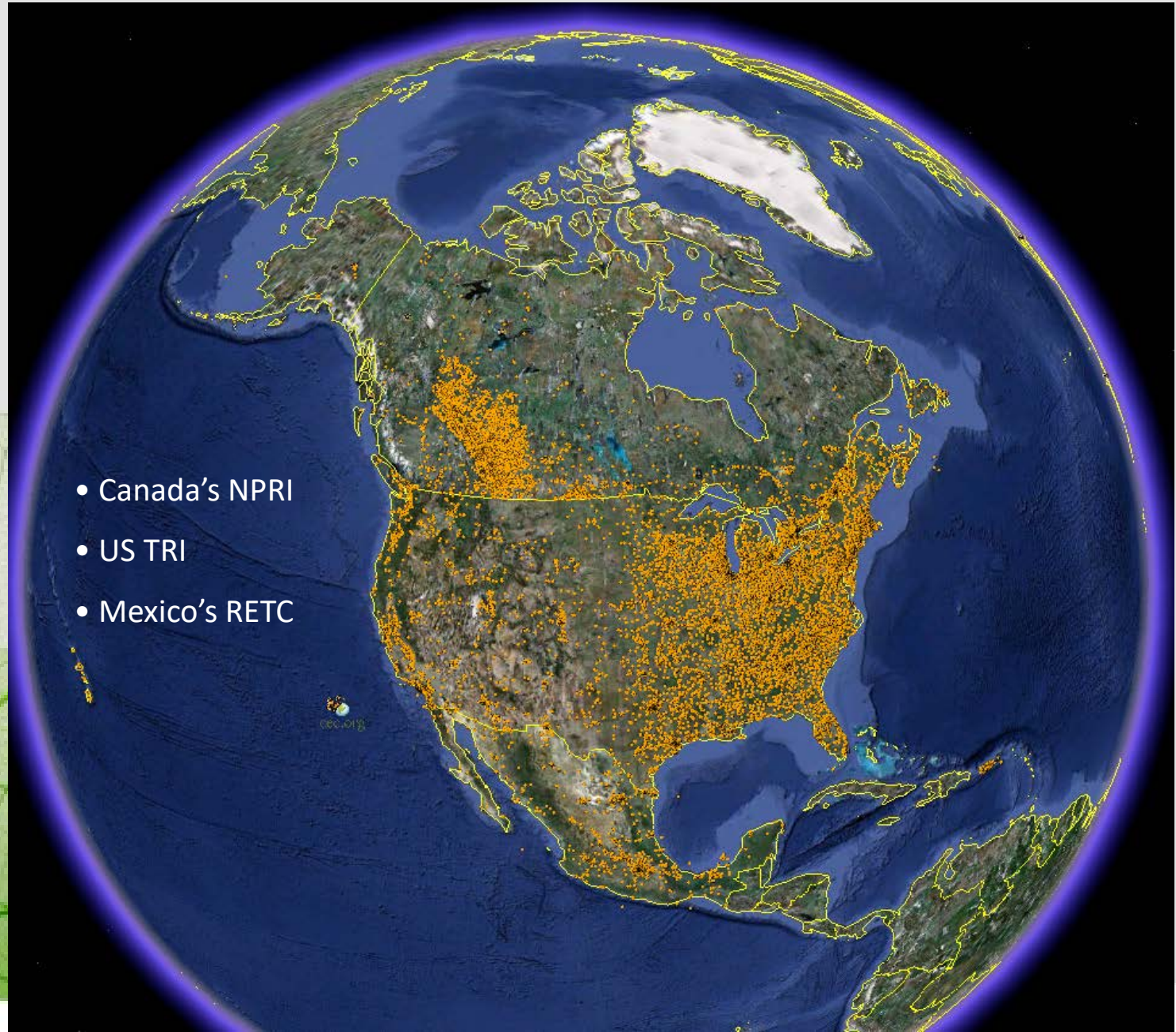
J.W. von Goethe

Taking Stock Report and Website

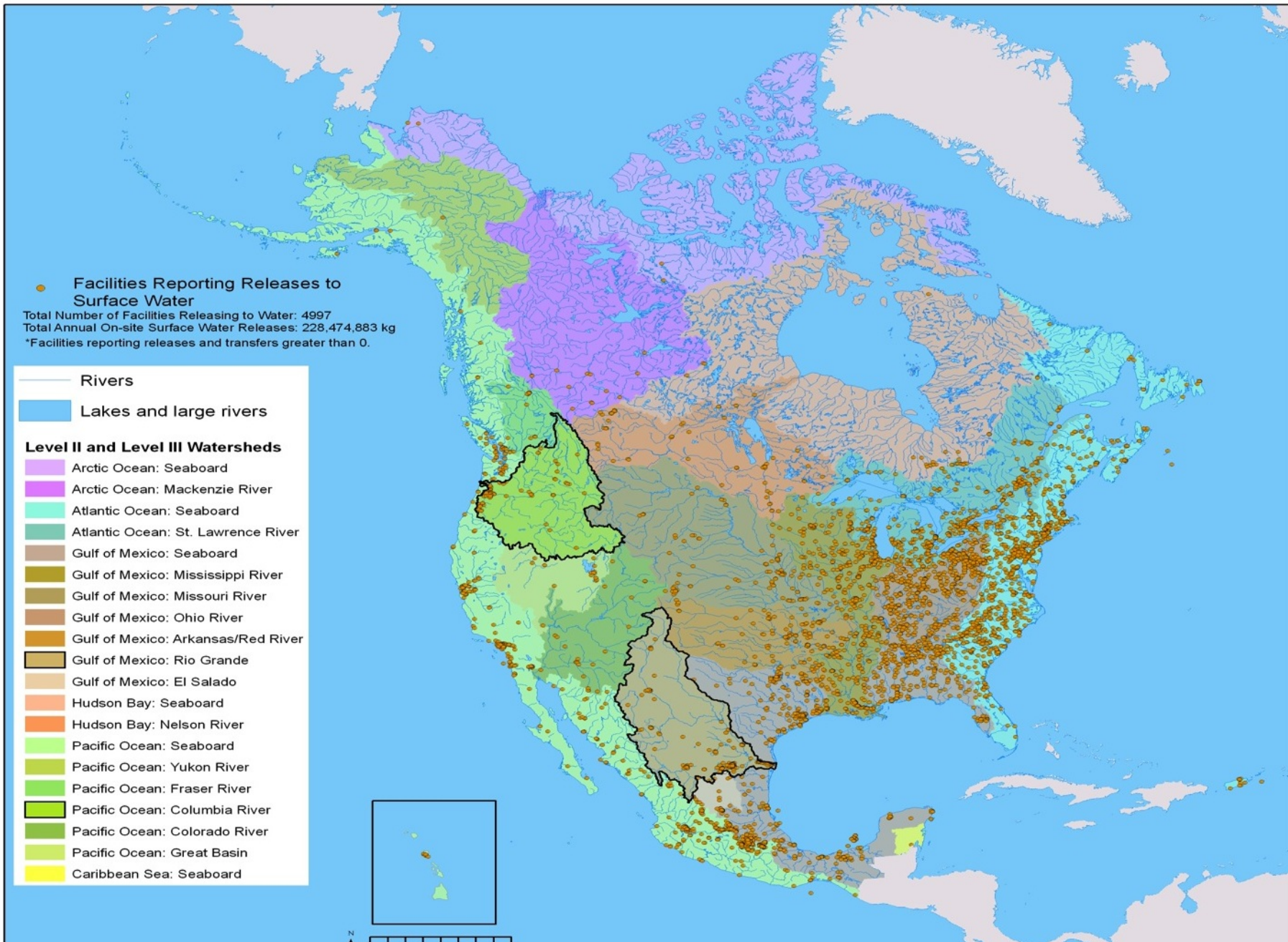


PRTR reporting facilities

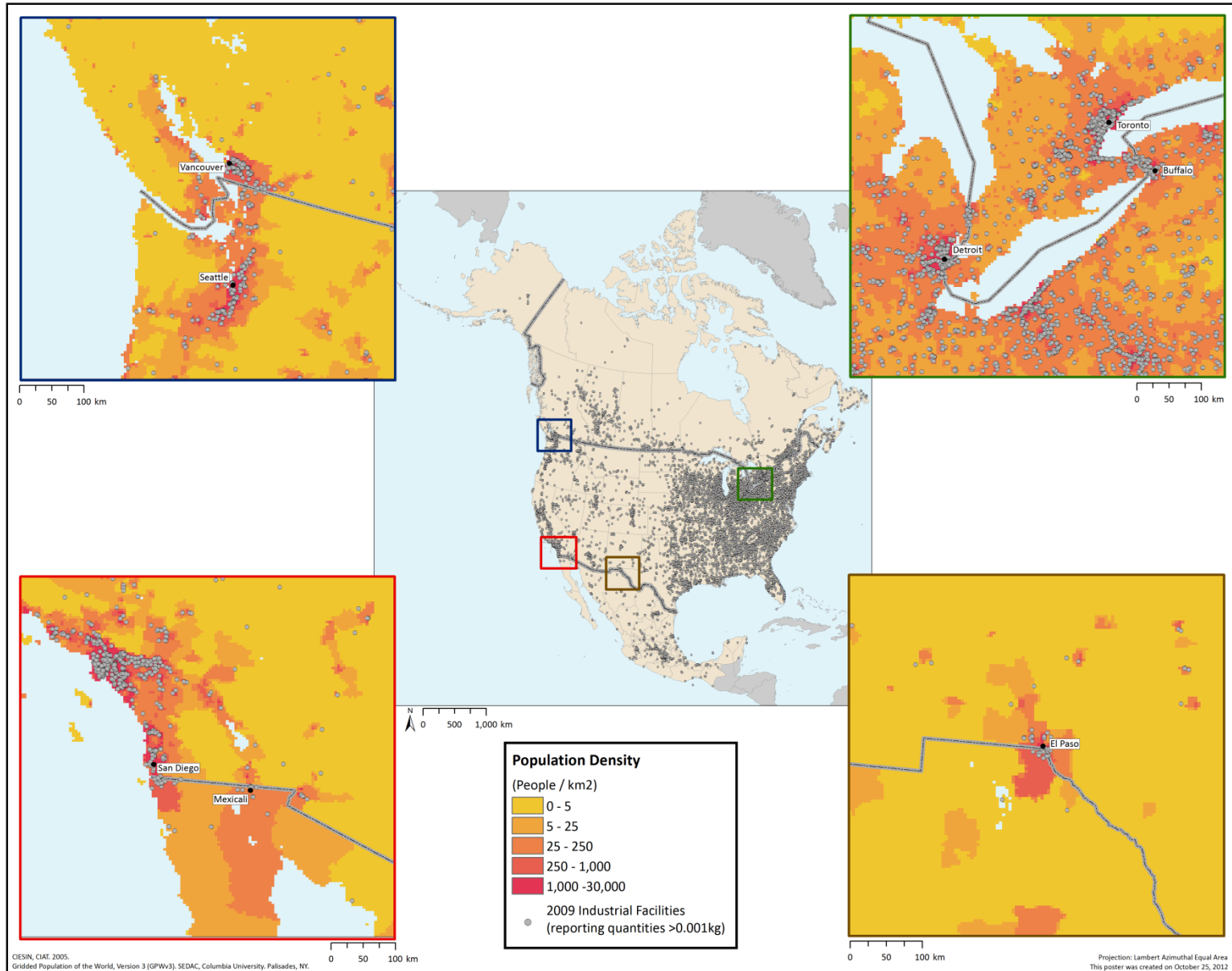
- Canada's NPRI
- US TRI
- Mexico's RETC



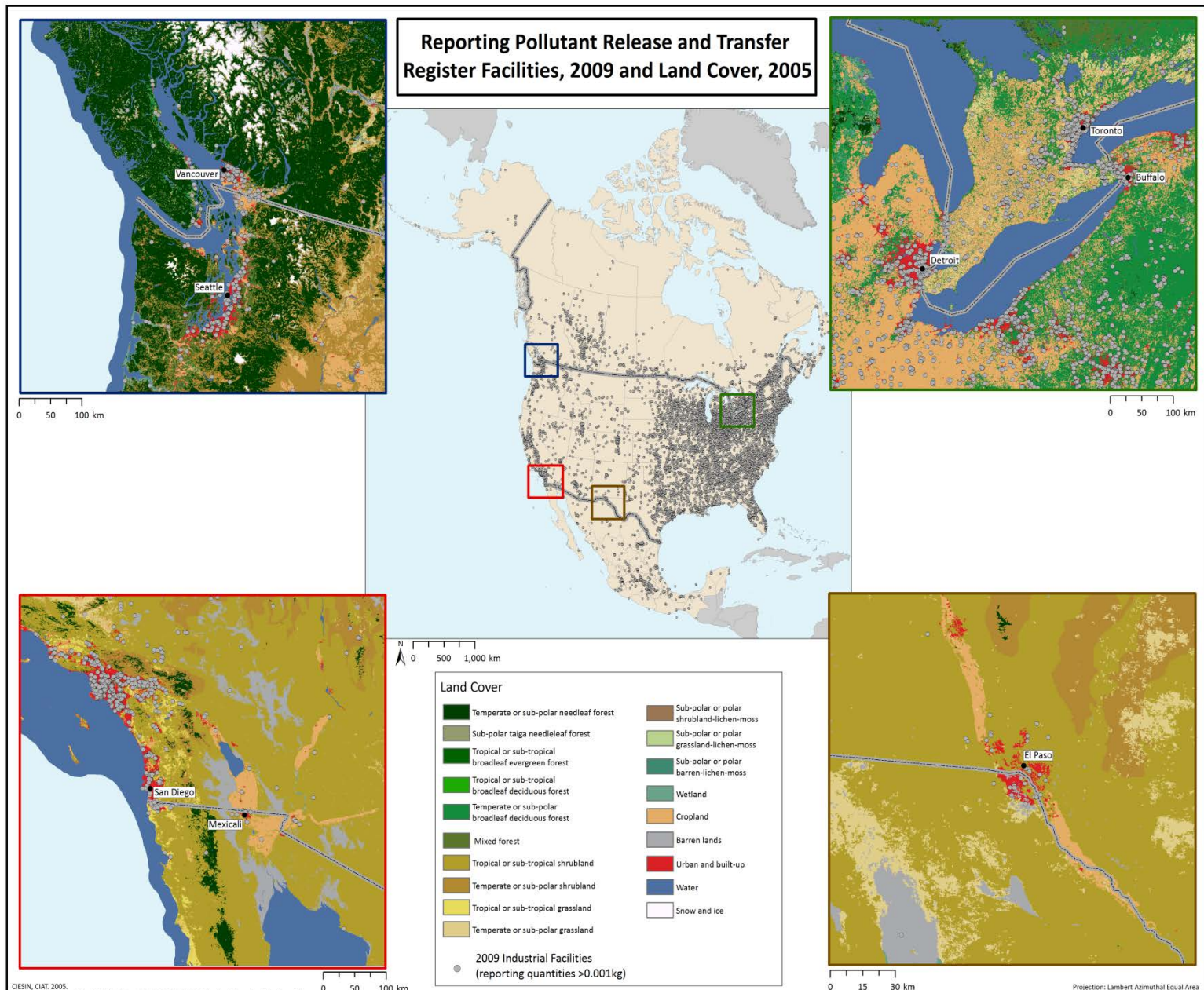
North American Watersheds and Facilities Reporting Releases to Water



Reporting PRTR Facilities, 2009 and Population Density



Reporting PRTR Facilities and Land Cover



CEC Air Quality and Pollutant Releases

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www.cec.org/takingstock



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Three countries. One environment.