

Voluntary Standards: What Role for aggregates?







Aggregates in Ontario: Construction Material Aggregate

- Mortar sand
- Parking lots
- Piers & Wharfs
- Pipes (mains and sewers)
- Power plants
- Railway bedding
- Retention walls
- Riverbed lining
- Roads & highways
- Roads: road bed, surface
- Roofing granules
- Housing
- Landscaping
- Rubble and riprap
- Runways
- Septic system/beds
- Shoreline protection
- Sidewalks
- Subway tunnels
- Tunnels
- Wind turbines
- Asphalt aggregate
- Backfill for mines
- Bridges
- Buildings (offices, hospitals, schools)
- Concrete aggregate



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Socially and Environmentally
Responsible Aggregate



Aggregates in Ontario

An Important Building Block

- Increased Aggregate Demand
 - Ontario municipalities consumed, on average, 55 Million tonnes of aggregate annually from 1996 – 2008*
 - Anticipated increase of 4.9 million people in Ontario by 2036.*
 - *Majority of Ontario infrastructure is reaching 50 – 60 years of age***
- Aggregate required for typical development projects, excluding concrete uses which include aggregates***
 - 18,000 tonnes per Km of a two lane highway in Southern Ontario
 - 250 tonnes per 2,000 sq. ft. house
 - 114,000 tonnes per Km of subway line
 - 730 tonnes for offices, schools and hospitals (1,000 m²)
 - 14,500 tonnes per Km of under road sewer line

* Source: www.mnr.gov.on.ca

** Source: Ministry of Finance Long-Term Report on the Economy, 2010)

*** Source: SAROS Paper 1: Aggregate Consumption and Demand, December 2009



Aggregates in Ontario

An Important Economic Driver

- \$37 billion construction industry in Ontario relies heavily on access to local aggregate sources
- Aggregate industry directly employs 7,000 people
- Aggregate industry indirectly employs 34,000+ in transportation and equipment sectors

Source: : www.mnr.gov.on.ca



Many Stakeholders



PRODUCERS



REGULATORS



PURCHASERS



ENVIRONMENTAL
STEWARDS



NEIGHBOURS



Ongoing Conflict

ELMIRA
Independent

“Visual impact of gravel pit under review”

**THE HAMILTON
SPECTATOR**

“Province steps in to Carlisle quarry fight”



**Ontario
GREENBELT
ALLIANCE**

The current “business as usual” policies for extraction of stone, sand, gravel and shale in the Province of Ontario are unsustainable

680 News
ALL NEWS RADIO

“First Nation community protest mega quarry plans for Niagara Escarpment”

ANCASTER NEWS

“Quarry is complex issue with a long history”

THE GLOBE AND MAIL
CANADA'S NATIONAL NEWSPAPER • FOUNDED 1857

“Caledon residents score victory in quarry battle”



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Aggregates in Ontario

Frustration and Competing Concerns

Community Frustrations

- Regulatory license does not address community concerns
- Lack of environmental protection in regulations: *“The number of aggregate inspectors...is totally inadequate” Gord Miller, ECO*
- Weak community consultation
- Negative environmental impacts due to poor siting
- Noise and air pollution
- Complexity of Ontario’s hydrogeology system unaccounted
- Poor commitment to rehabilitation
- Lack of incentives for resource efficiency

Industry Frustrations

- No clear path to obtain social license
- Lengthy and expensive licensing process
- Uncertain outcomes even after following regulatory process
- Inability to demonstrate responsibly sourced materials to purchasers
- Poorly defined social and environmental expectations



Aggregates in Ontario Regulatory & Social Licenses

Current process fails to secure a social license to operate and results in conflict

Social License

Voluntary Standards

- Certified by 3rd party organizations to meet world-class standards
- Recognizes operations that demonstrate significant efforts to exceed MNR requirements
- Addresses community interests in a clear but flexible format
- Satisfies market demand for responsibly sourced materials
- Creates incentives for operators to go beyond the regulatory requirements
- Enforced through transparent 3rd party auditors on a regular cycle
- 100 % voluntary

Regulatory License

ARA Regulations

- Issued by the Ministry of Natural Resources
- Provides minimum requirements for the operation and rehabilitation of pits and quarries
- Addresses legal right to extract aggregates
- Does not provide traceability of construction materials
- Provides no incentives for operators to exceed the minimum requirements
- Enforced through aggregate inspectors
- Applies to every legally operated site

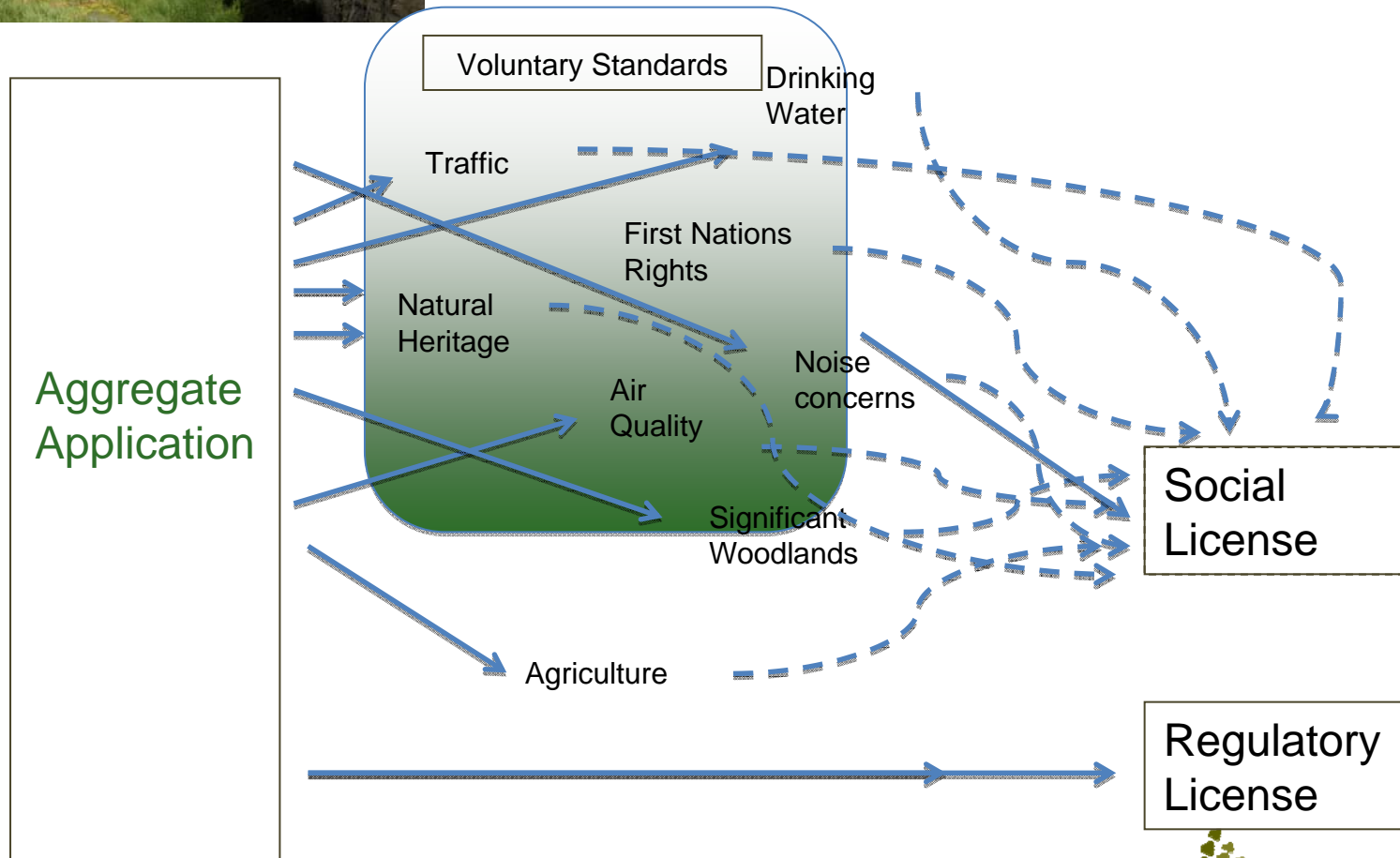


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Collaborative Solution + Clearly Defined Standards = Success For All Sides





Success in other resource sectors





Voluntary Standards Market Solutions to Conflict

Voluntary Standards may help resolve the current state of conflict by:

- Creating market-based incentives for resource efficiency
- Offering purchasers the option of responsibly sourced and traceable construction materials
- Protecting the most important ecological and hydrological areas
- Establishing fixed-term licenses and phase-out plans
- Demanding world-class industry operational practices
- Providing net-gain replacement of ecological and hydrological spaces
- Improving community engagement through Public Advisory Committees



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Draft SERA Standards Proposed Principles

Principle 1: Compliance with laws

- Aggregate extraction activities meet or exceed the requirements of all applicable laws in the jurisdictions in which the extraction occurs.

Principle 2: Community consultation & involvement

- Public understanding of aggregate extraction activities is achieved by inclusive and transparent stakeholder involvement in all major steps of the resource development, including siting, footprint design, operations and rehabilitation.

Principle 3: Respect for indigenous peoples rights & culture

- The legal and customary right of indigenous peoples to protect their cultural heritage, and to use and manage their lands, territories, and resources is recognized and respected appropriately.



Draft SERA Standards

Proposed Principles

Principle 4: Benefits to local communities & workers

- Aggregate extraction activities maintain or enhance the long-term social and economic well being of local communities and workers.

Principle 5: Environmental and water impacts & site stewardship

- Aggregate extraction activities are designed to protect, restore or improve biological diversity, water, soils, and to protect unique and fragile ecosystems and landscapes.

Principle 6: Resource efficiency

- Maximizing the use of recycled content and developing optimal transportation networks that factor in both financial and environmental costs.

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Principle 7: Traceability

- Systems are in place to track aggregate from certified operations through to its end use.



Why draft standards?



- *The Draft Standards* provide a strong foundation to build the Final Standards upon
- But to complete the job we need to ensure we have engaged the support of the right stakeholders



SERA Mandate

Convene and engage a broad group of stakeholders to:

- Revise and build consensus for standards which set a high but achievable bar for the aggregate sector
- Help design and build a credible approach for assessing compliance against these standards



SERA Founding Board Members

- Michael Fenn, Interim chair
- Maia Becker: Vice President, Forest Stewardship Canada (FSC)
- Nick Caccavella: Senior VP, Holcim Canada
- Bill Galloway: Senior VP, Holcim Canada
- Tim Gray: Program Manager, Ivey Foundation
- Peter Kendall: Executive Director, Schad Foundation
- Thomas Mueller: President and CEO, Canada Green Building Council
- Rick Smith: Executive Director, Environmental Defence
- Eric Stevenson: Director, Environmental Defence and Salmon Federation

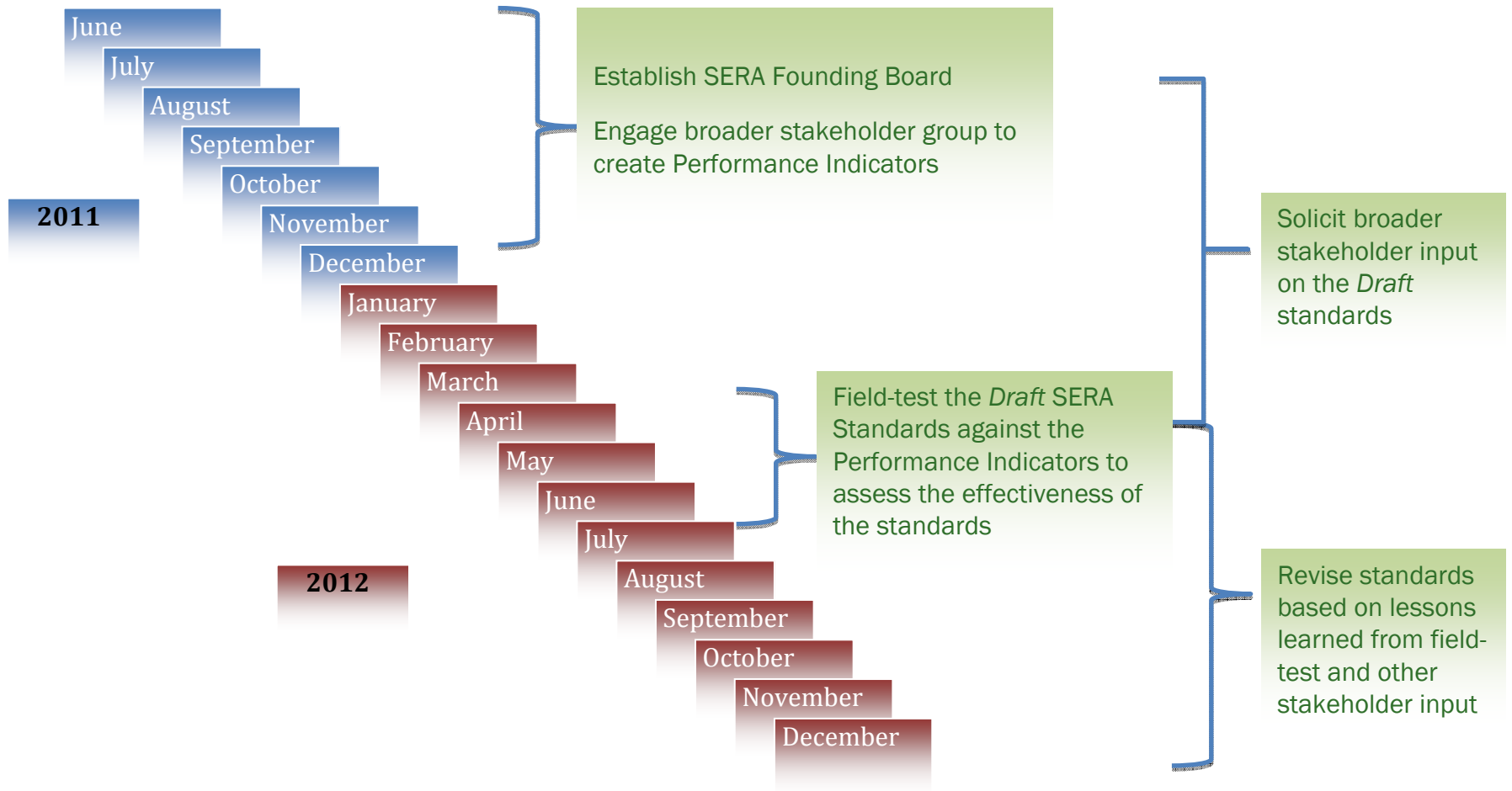


SERA Standards Development Panel

Chair: Brenda McCabe, Dean of Faculty of Civil Engineering, U ofT

- Region of Waterloo
- Mark Dorfman (land use and environmental policy planner)
- Friends of Rural Communities and the Environment (FORCE)
- Gravel Watch Ontario
- Environmental Defence
- The Miller Group
- CONDRAIN Group
- Dufferin Aggregates
- Ontario Ministry of Natural Resources (observer)

What Next?



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SERA Contacts

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- Primary point of contact for questions or concerns regarding SERA membership and administrative concerns.