# Niagara Escarpment Plan context

### Niagara Escarpment Plan 2015

- The Cheltenham Badlands property falls under the **Escarpment Protection Area** land-use designation of the Niagara Escarpment Plan (NEP).
- Escarpment Protection Areas are important because of their visual prominence and their environmental significance.
- Included are escarpment features that have been significantly modified by land-use activities, land needed to buffer prominent escarpment natural areas, and natural areas of regional significance.

### Niagara Escarpment Parks and Open Space System

- The property is also classified as an **Escarpment access** park in the Niagara Escarpment Parks and Open Space System (NEPOSS) of the NEP.
- Part 3 of the NEP sets out policies for the NEPOSS, which serves to guide management and use of the parks and open spaces in the plan area.
- Escarpment access areas are intended to provide opportunities for public access to the Niagara Escarpment. These areas may provide modest facilities to support day-use activities at viewpoints, scenic areas or other points of interest.

### Cheltenham Badlands Master Plan



# NEPOSS objectives

The objectives of the Niagara Escarpment Parks and Open Space System (NEPOSS) are:

- To protect unique ecological and historical areas;
- To provide adequate opportunities for outdoor education and recreation;
- To provide for adequate public access to the Niagara Escarpment;
- To complete a public system of major parks and open space through additional land acquisition and park and open space planning;
- To secure a route for the Bruce Trail;
- To maintain and enhance the natural environment of the Niagara Escarpment;
- To support tourism by providing opportunities on public land for discovery and enjoyment by Ontario's residents and visitors;
- To provide a common understanding and appreciation of the Niagara Escarpment; and
- To show leadership in supporting and promoting the principles of the Niagara Escarpment's UNESCO World Biosphere Reserve Designation through sustainable park planning, ecological management, community involvement, environmental monitoring, research and education.



### NEPOSS planning process

#### Niagara Escarpment Parks and Open Space System Management/Master Plans

- Management / Master plans are prepared for each NEPOSS property.
- The development of a NEPOSS plan involves a consultative process with input from relative government agencies and approval authorities, First Nations, stakeholders and members of the public.
- The final draft of the plan must align with NEP policy and be endorsed by the Niagara Escarpment Commission (NEC) prior to review by Ministry of Natural Resources and Forestry for final approval.

#### Master Plan for the Cheltenham Badlands

- The Ontario Heritage Trust (OHT) consults with the Cheltenham Badlands Management Planning Team on the development of the Master Plan for the property. This team includes the Region of Peel, Town of Caledon, Credit Valley Conservation, Caledon Country Side Alliance, Mississaugas of the New Credit First Nation, Bruce Trail Conservancy and the NEC.
- The OHT commissioned an online survey and is hosting a series of public meetings to seek input from members of the public.
- The Master Plan will be informed by the four guiding principles and input from the Cheltenham Badlands Management Planning Team, the consultant (Dillon) and the general public.

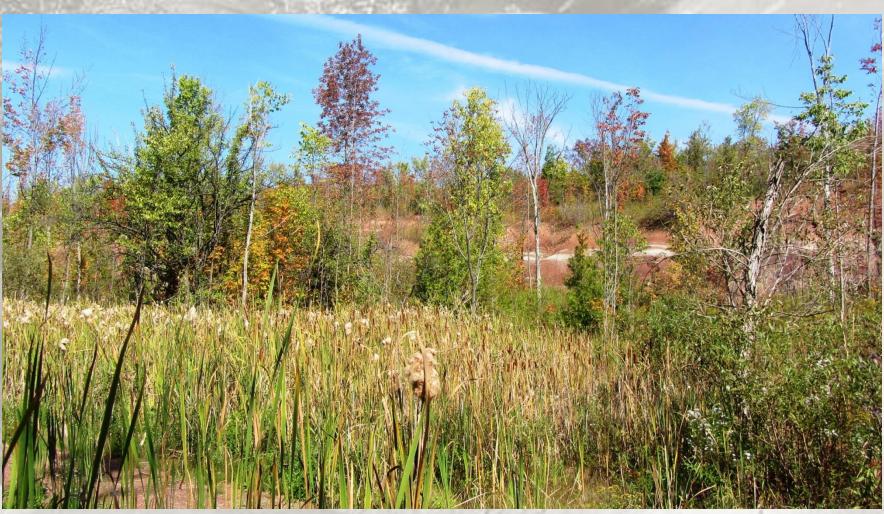


# Guiding principles for the Cheltenham Badlands

The Ontario Heritage Trust is a public conservation agency that holds property for the benefit for the people of Ontario. The Cheltenham Badlands property is a provincially significant earth science Area of Natural and Scientific Interest and has been classified as an Escarpment Access park through the Niagara Escarpment Parks and Open Spaces System. In this context, the Management Planning Team developed the following principles to inform the management and planning for the site.

- 1. Conservation of the property's cultural and natural heritage values
- 2. Safety for all individuals who visit the site
- 3. Improved accessibility for those who wish to access the site
- 4. Enhanced opportunities for interpretation and public education







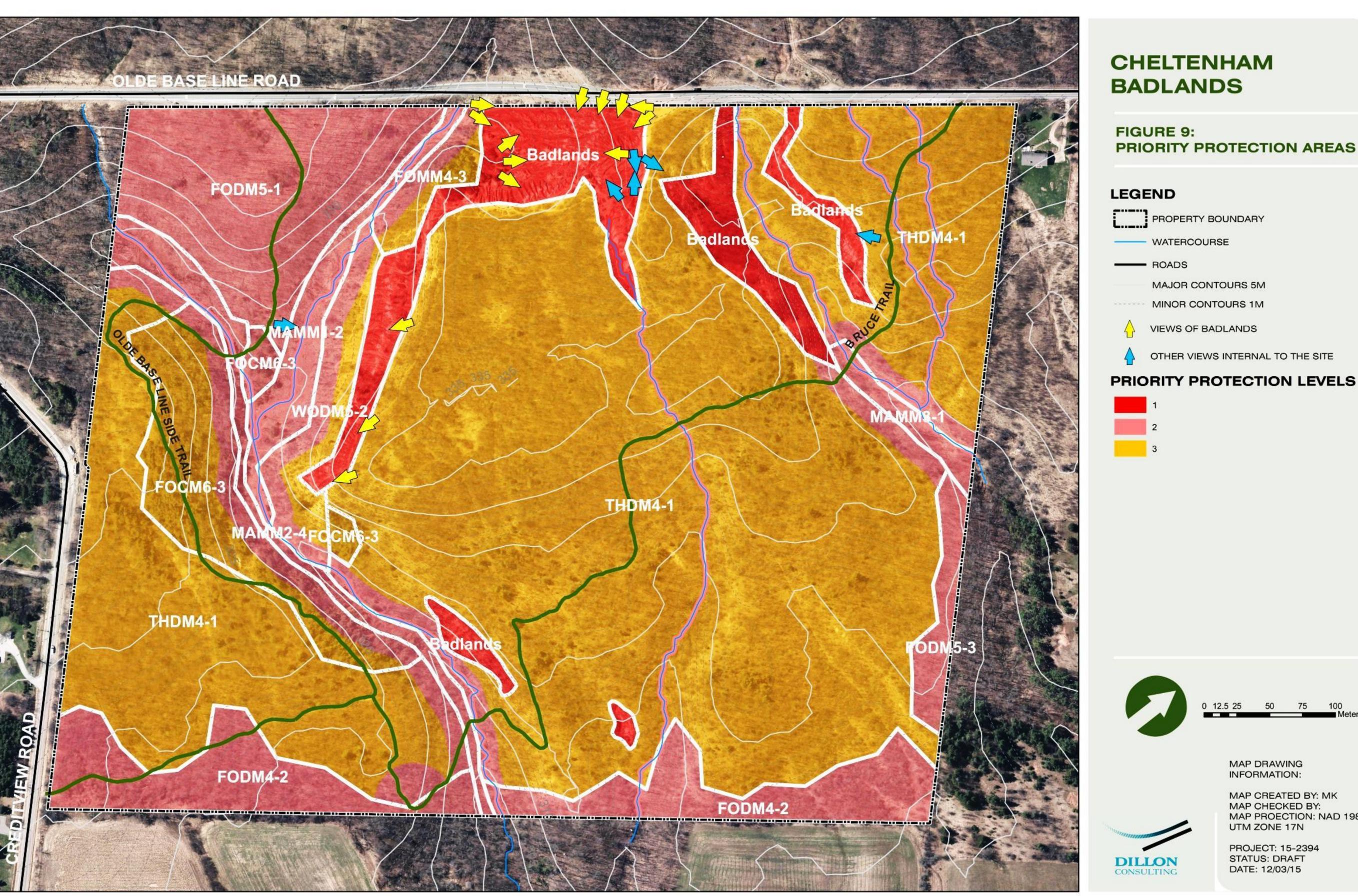
# Cheltenham Badlands Master Plan Public Meeting #2 January 25, 2016



# Stage 1 - Inventory and environmental analysis summary

### Stage 1 work Included:

- Review/consolidation of information in past technical studies, supplemented by field investigations.
- Identification of site attributes, including presence of species of conservation concern and species at risk.
- Review of applicable planning and environmental policies (federal, provincial, regional, municipal and Niagara Escarpment Plan).
- Analysis of resources, management issues and site-development opportunities related to: natural heritage, cultural heritage, recreation and visual resources.
- Research on visitor impact management models used at other publicly owned, natural-environment sites.
- Development of priority protection areas evaluation criteria/ranking and map.
- Identification of potential management zones for the site (using zones in the Niagara Escarpment Plan Open Space System (NEPOSS) Planning Manual).
- Identification of future development considerations to inform site concepts based on site resources, policy and public input (Public Feedback Survey, Public meeting #1).



#### CHELTENHAM **BADLANDS**

FIGURE 9: PRIORITY PROTECTION AREAS







0 12.5 25 50 75 100 Meters

MAP DRAWING INFORMATION:

MAP CREATED BY: MK MAP CHECKED BY: MAP PROECTION: NAD 1983 UTM ZONE 17N

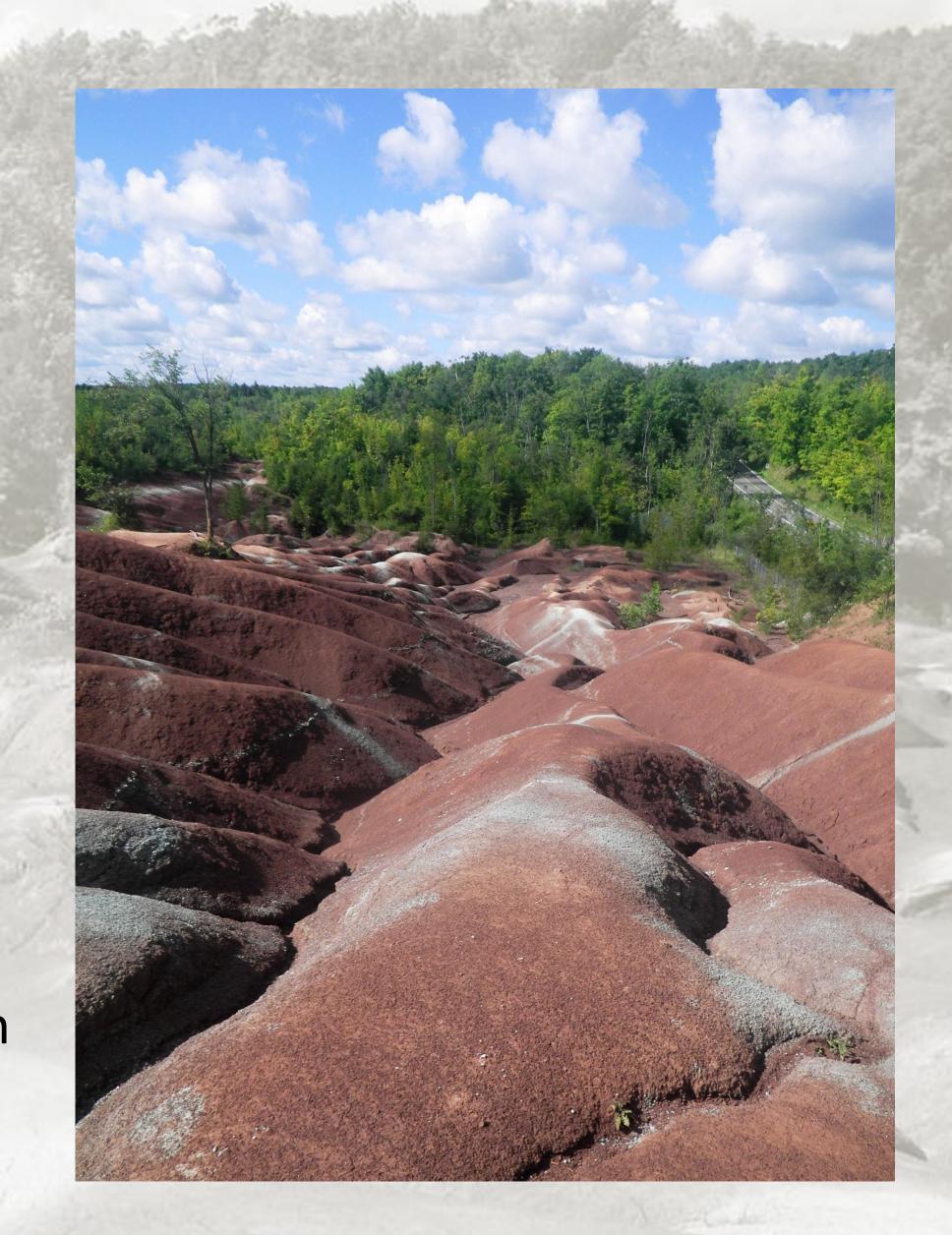
PROJECT: 15-2394 STATUS: DRAFT DATE: 12/03/15



# Priority protection areas

### **Evaluation process**

- Based on practices of integrated natural heritage system planning.
- Inventoried/ranked natural heritage resources within categories of natural core areas and natural corridors.
- Additionally included cultural heritage resources, recreation resources and significant views.
- Considered the relative significance of all resources and features that could be present on the site and assigned a priority ranking from 1 to 5 (highest to lowest).
- In areas of overlap on the site, the highest possible priority protection level prevailed.
- Priority protection areas will be used to inform the boundaries of management zones and strategies to direct natural heritage conservation and to manage visitation.







# Priority protection areas

### Priority protection area levels

#### **Priority Protection Level 1**

- Protects natural features that are considered to be particularly sensitive. Examples on other sites might include provincially significant wetlands or steep scarp face slopes.
- These features are not present on the property. The Badlands, however, were given a Level 1 ranking relative to other features on the site due to their sensitive and unique characteristics.

#### **Priority Protection Level 2**

- Protects high-quality natural areas that contribute essential components to the natural heritage system.
- Identified Level 2 areas on the site include un-evaluated or non-provincially significant wetlands, watercourses and their buffers (typically, 15 metres/49 feet) and habitat for species at risk.

### **Priority Protection Level 3**

- Protects high-quality natural areas that contribute essential components to the natural heritage system.
- Identified Level 2 areas on the site include un-evaluated or non-provincially significant wetlands, watercourses and their buffers (typically, 15 metres/49 feet) and habitat for species at risk.



# Priority protection areas

# Priority protection area levels continued

### **Priority Protection Level 4**

- Protects areas that buffer or contribute to the protection of other sensitive natural features and functions.
- Identified Level 4 areas on the site include: fringe forest areas (<100 metres/328 feet in size), plantations, regenerating forest habitat (e.g., shrub thickets).
- These areas are overlaid by areas identified as priority protection levels 2 and 3 on the site. Therefore, no Level 4 areas appear on the map.

### **Priority Protection Level 5**

- Provides protection for all remaining natural features that support ecological functions and species diversity.
- Examples on other sites include cultural meadows and agricultural fields.
- There were no identified Level 5 areas on the site.



# NEPOSS management zones

### Niagara Escarpment Parks and Open Space System (NEPOSS) management zones

- Under the Niagara Escarpment Plan, management zoning is required to promote orderly planning and development and effective management of sites within the NEPOSS.
- There are six possible NEPOSS management zones: Nature Reserve Zone, Natural Zone, Access Zone, Historical Zone, Development Zone and Resource Management Zone.
- Based on the site's characteristics and its role and function within the NEPOSS, the recommended management zones for the Cheltenham Badlands property are nature reserve zone and access zone.

#### Nature reserve zone

Description: Habitat of endangered, threatened, rare species or species of special concern; wildlife/fish habitat; streams/wetlands, woodlands, ANSIs.

Permitted uses (NEPOSS Planning Manual):

Trails/footpaths, signs, interpretive facilities, temporary research facilities, conservation practices.

Application to the Badlands: Majority of the property.

#### Access zone

Description: Staging areas to support uses in other zones.

Permitted uses (NEPOSS Planning Manual): Minimal facilities to support uses (e.g., trailheads, signs, walkways, parking lot(s)).

Application to the Badlands: Bruce Trail trailheads, planned parking lot on Olde Base Line Road, potential parking lot on Creditview Road (requires further evaluation).

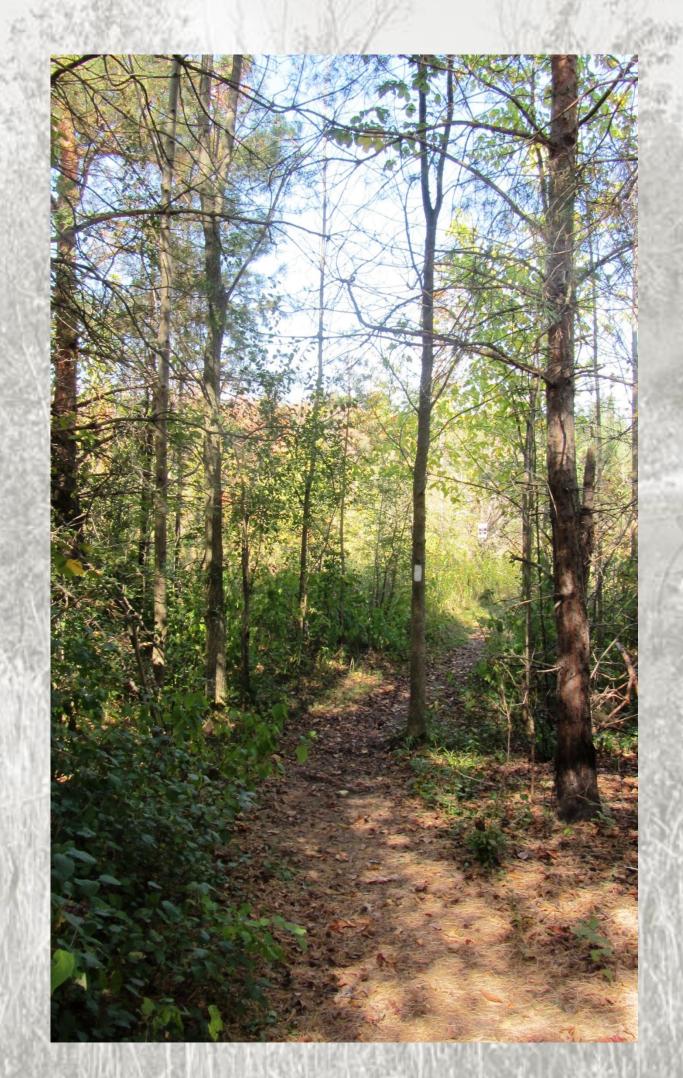
### Cheltenham Badlands Master Plan

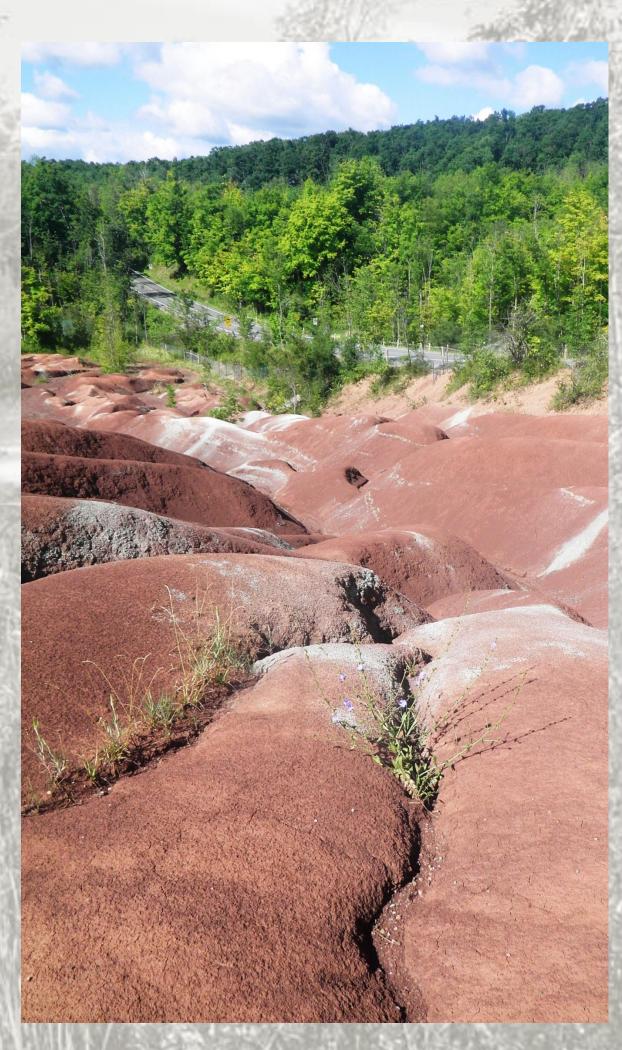


# Overall management approach

#### Adaptive management

- Monitors for ongoing physical, biological and social indicators.
- Includes reiterative evaluation of goals.
- Management re-direction is based on changing conditions, new information or changing public expectations.
- Further studies and/or monitoring for species of conservation concern and species at risk may be required, depending on future uses of the property.







# Natural heritage management approach

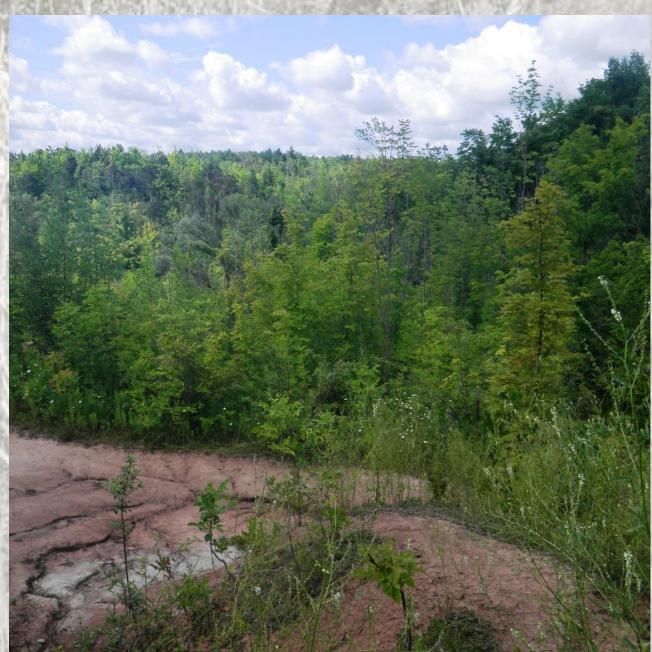
#### Species of conservation concern / species at risk

- Monitors for ongoing physical, biological and social indicators.
- Includes reiterative evaluation of goals.
- Management re-direction is based on changing conditions, new information or changing public expectations.
- Further studies and/or monitoring for species of conservation concern and species at risk may be required, depending on future uses of the property.

#### **Invasive species**

- Include phragmites, garlic mustard, European buckthorn and emerald ash borer.
- Management via removal and replanting is needed to encourage desirable species and improve floristic diversity.
- Additional assessment of locations is needed to inform a maintenance and monitoring regime.







# Cheltenham Badlands Master Plan Public Meeting #2 January 25, 2016



# Visitor management approach

#### **Badlands feature**

- Include phragmites, garlic mustard, European buckthorn and emerald ash borer.
- Management via removal and replanting is needed to encourage desirable species and improve floristic diversity.
- Additional assessment of locations is needed to inform a maintenance and monitoring regime.

#### Natural areas

- Control access through natural areas via a managed system of trails/footpaths.
- Limit trails and visitor support facilities to more resilient areas. Close/manage rogue trails.

#### **Trails & Viewing Areas**

- Consider social carrying capacity, visual and physical impacts of developed features.
- Explore opportunities for loop trails to enhance visitor experience and allow pedestrian flow.
- Incorporate interpretive/educational messaging.



# Public meeting #1 summary of participant input

#### Summary of identified issues:

- Questions about study process and consultation methods; role of technical studies completed to date; role and relative weighting of Public Feedback Survey input.
- Concerns over protection of site's geological and biological integrity.
- Concern over erosion impacts (Badlands feature and wetland/watercourse).
- Desire for site fencing to be permanent.
- Desire to restrict/control visitation. The range of comments included
  - limit Badlands feature to viewing only; provide samples of Queenston Shale for people to touch
  - restrict public access to entire site; preserve site for study and research
- Concerns over road safety and traffic impacts to the local community from visitation to the site.
- Concerns over planned parking lot. Range of comments included:
  - not large enough,
  - too impactful to the site, and
  - will increase traffic and safety concerns on Olde Base Line Road.

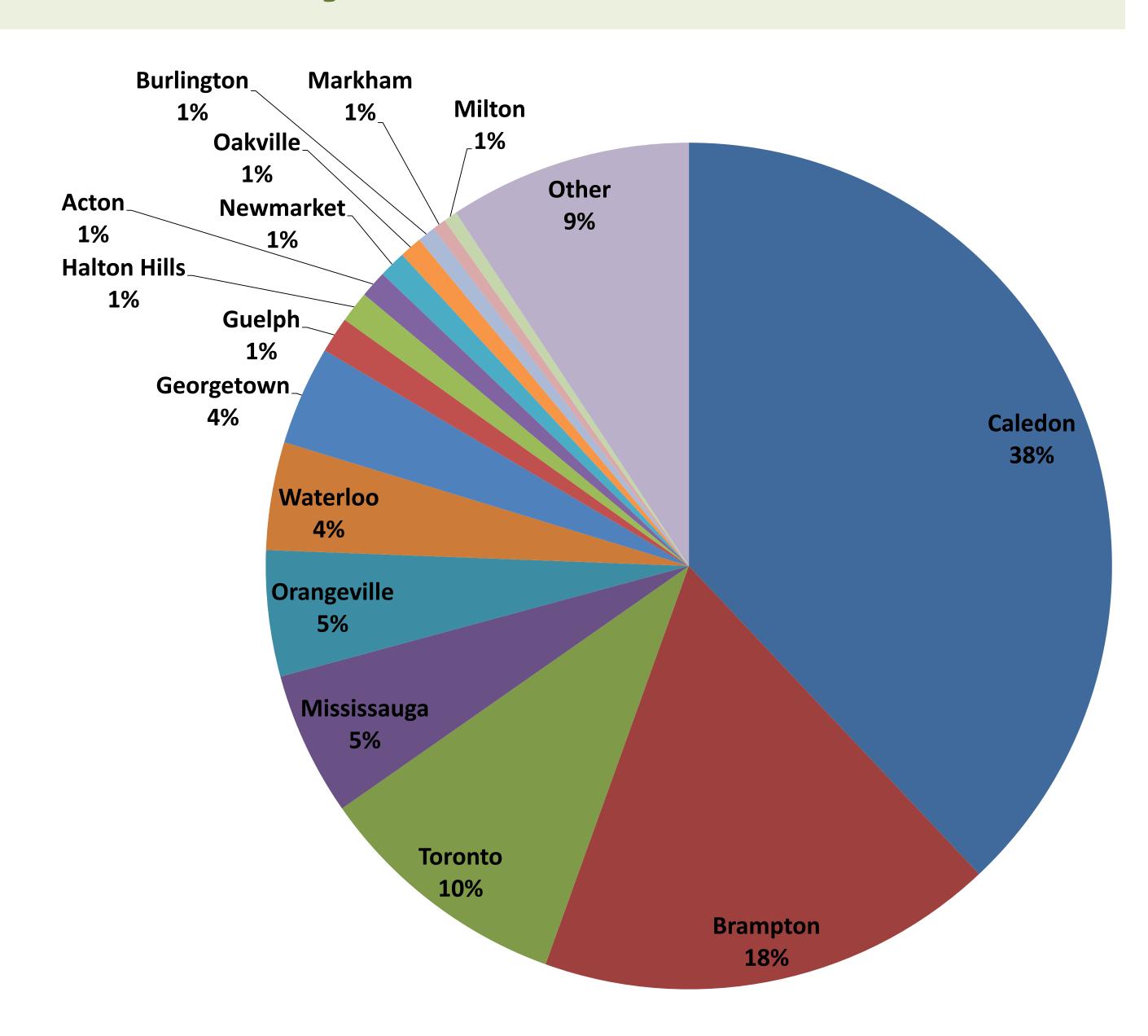


# Public meeting #1 summary of workshop exercise

Amenities/	Support	Somewhat	I would support if	Don't support
improvements (provided list)	(number of people)	support (number of people)		(number of people)
Observation deck(s)	16		<ul> <li>□ The area remains fenced</li> <li>□ Good parking nearby.</li> <li>□ There were more than one.</li> <li>□ Confined so access to the site is protected but visually accessible.</li> <li>□ Only if this would help keep people off the shale.</li> <li>□ Only one outside the fence.</li> </ul>	
Observation tower	6		<ul><li>□ It does not distract from the viewscape.</li><li>□ You can see city skyline.</li><li>□ It didn't affect the beauty of the landscape.</li></ul>	11
Reconfigured/improve trails/pathways	14		□Good parking nearby. □Remove rogue trails, keeping people on supporting trails connected to observation deck. □Restricted access is required to not exceed carrying capacity. □Very controlled Bruce Trail path with only hiking allowed. □No feet on shale whatsoever. Create parking away from major road, let people walk half hour to see the Badlands.	
Natural environment protection/enhancement areas (existing or expanded)	16		<ul> <li>□Good parking nearby.</li> <li>□Protection only in form of a fence, etc.</li> <li>□Natural environment must trump tourism if we are truly committed to preservation.</li> <li>□This is an ANSI – must be protected/preserved.</li> </ul>	<b>I</b>
Interpretive/educational installations (onsite)	12	2	□ Parking more important. □ It were simple. □ Use of possible "clay industry in Caledon" sign.	3
Interpretive/educational materials (web-based)	12	2		3
Interactive zones (areas to physically experience the topography)	7	2		7
Washrooms	9		<ul><li>☐ If it was part of a larger visitor centre.</li><li>☐ Charge for use.</li><li>☐ By the parking lot.</li></ul>	7
Park furniture (benches, garbage cans, bike racks, etc.)	10		Garbage cans only.  □ Bicycle racks, garbage cans, minimal benches.  □ Also include picnic tables.  □ Use of clay/brick theme.  □ Bike racks only.  □ Garbage cans only.  □ Garbage cans and benches associated with walking trail from parking lot and no pedestrian access to Badlands.	3
Guided tours	9	2	<ul> <li>□Good parking available.</li> <li>□Education/university/schools use.</li> <li>□Very limited numbers.</li> <li>□If funds collected went to support the site.</li> <li>□This were a last resort.</li> </ul>	4
Shuttle service from other local sites	7	2	<ul> <li>□ Needs to be part of an integrated plan for managing tourism traffic in Caledon.</li> <li>□ Transportation services.</li> <li>□ Safety, less traffic on roads. Improved transportation plan, traffic management.</li> <li>□ Careful management on peak periods.</li> <li>□ This was a last resort.</li> <li>□ If it was fee-based.</li> </ul>	3

#### Survey

- Launched in September 2015
- Advertised in six newspapers and online at OHT and partner websites
- Survey closed in October 2015
- Total of 590 respondents:
  - Caledon (38%)
  - Brampton (18%)
  - Mississauga (5%)
  - Toronto (10%)
  - Orangeville (5%)
  - Georgetown (4%)
  - Guelph, Halton Hills, Burlington, Markham, Milton (1%)
  - Responses from Quebec, Manitoba, Ottawa, British Columbia









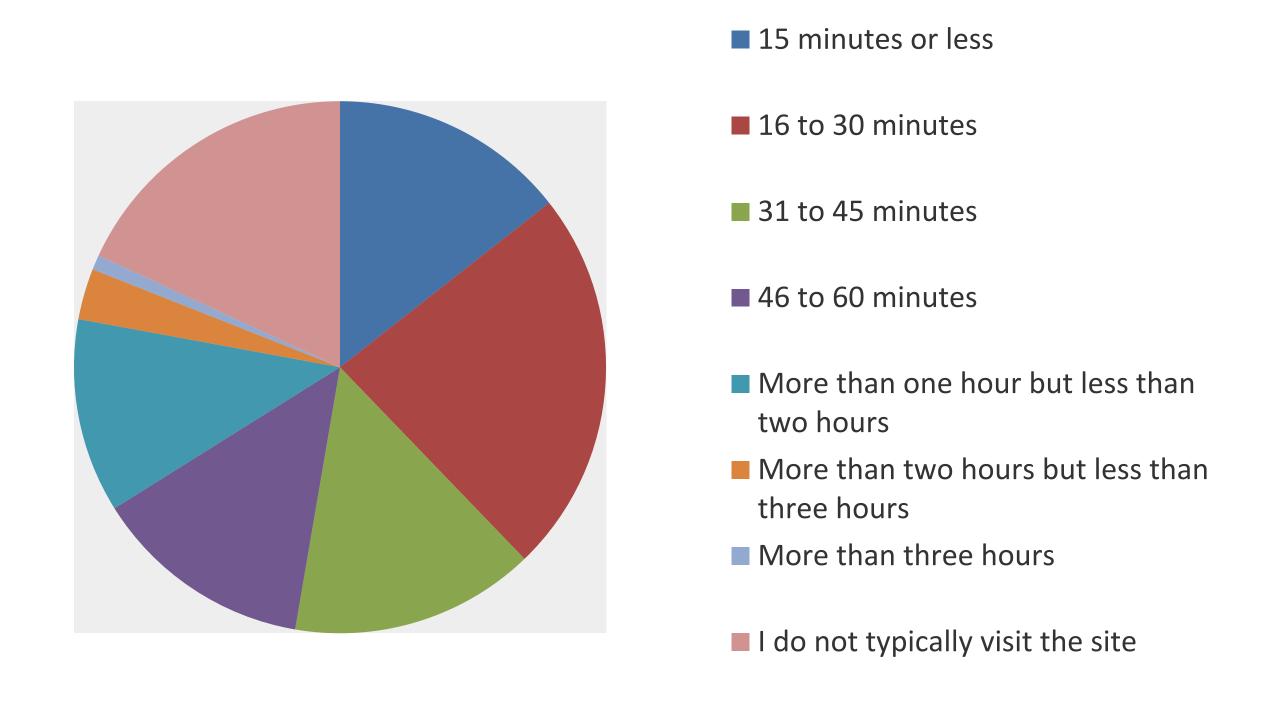
#### Length of stay on a typical visit

15 minutes or less	14.4%
16 to 30 minutes	23.4%
31 to 45 minutes	14.9%
46 to 60 minutes	13.4%
More than 1 hr. but less than 2 hrs.	11.8%
More than 2 hrs. but less than 3 hrs.	3.1%
More than 3 hours	0.9%
I do not typically visit the site	18.1%

#### Activities undertaken in the local area

- Visited local restaurants/food vendors (35%)
- Visited other conservation/nature areas (34%)
- Visited local shops/stores (28%)
- Visited friends and family (16%)
- Visited only the Cheltenham Badlands (26%)
- Visited a sports/recreational site (e.g., golf, ski hill) (8%)
- Other: hiking the Bruce Trail or elsewhere; fishing

During a typical visit, how long did you stay at the Cheltenham Badlands (prior to the temporary closure of the site)?



### Types of activities undertaken on the site

- Viewing/appreciation of the landscape (82%)
- Photography/videography (51%)
- Hiking on the Bruce Trail (40%)
- Picnicking, star-gazing, educational research (<5%)

### Cheltenham Badlands Master Plan

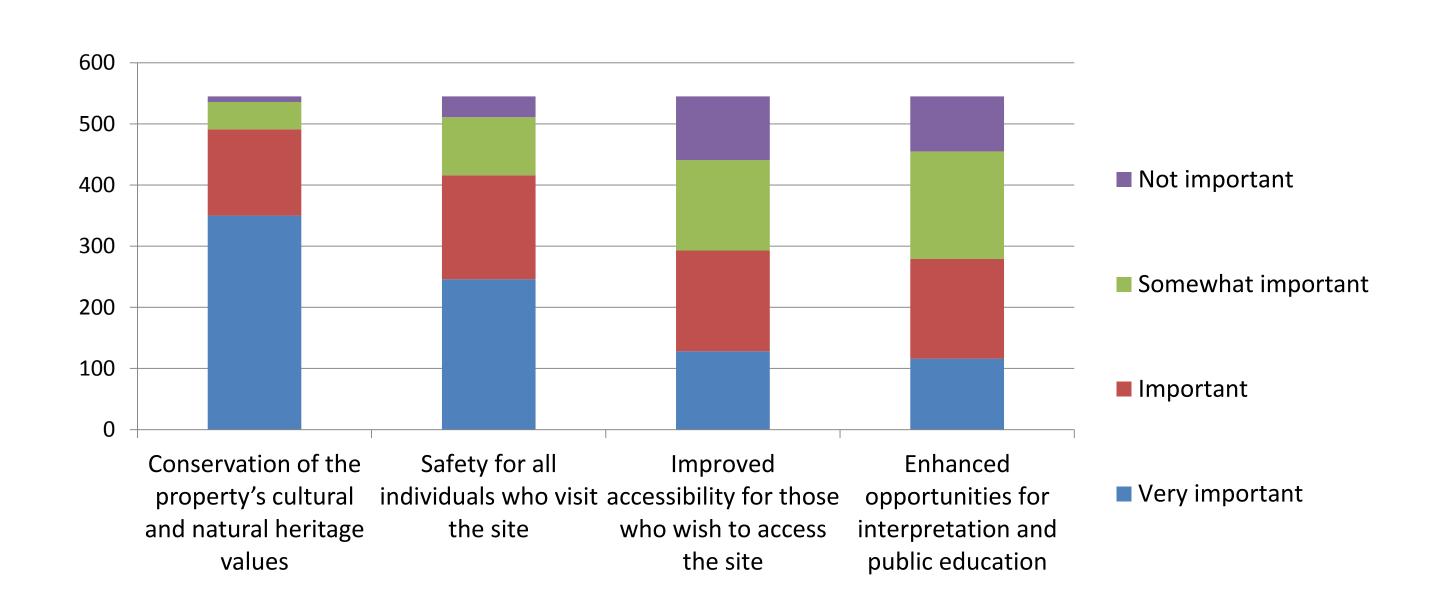




# Support for principles (*Important* or *Very Important*)

- 1. Conservation of the property's cultural and natural heritage values (90%)
- 2. Safety for all individuals who visit the site (76%)
- 3. Improved accessibility for those who wish to access the site (54%)
- 4. Enhanced opportunities for interpretation and public education (51%)

The Cheltenham Badlands Management Planning Team has developed four guiding principles to direct all future work on the site. Please rate the importance of each principle.



#### **Concern over safety**

- The majority of respondents (80%) showed some level of concern (Slightly Concerned, Concerned, or Very Concerned)
- 21% were *Not Concerned*

#### Concern over erosion

- The majority of respondents (82%) showed some level of concern (Slightly Concerned, Concerned, Very Concerned)
- 18% were *Not Concerned*







# Top ranked amenities/Improvements to the site

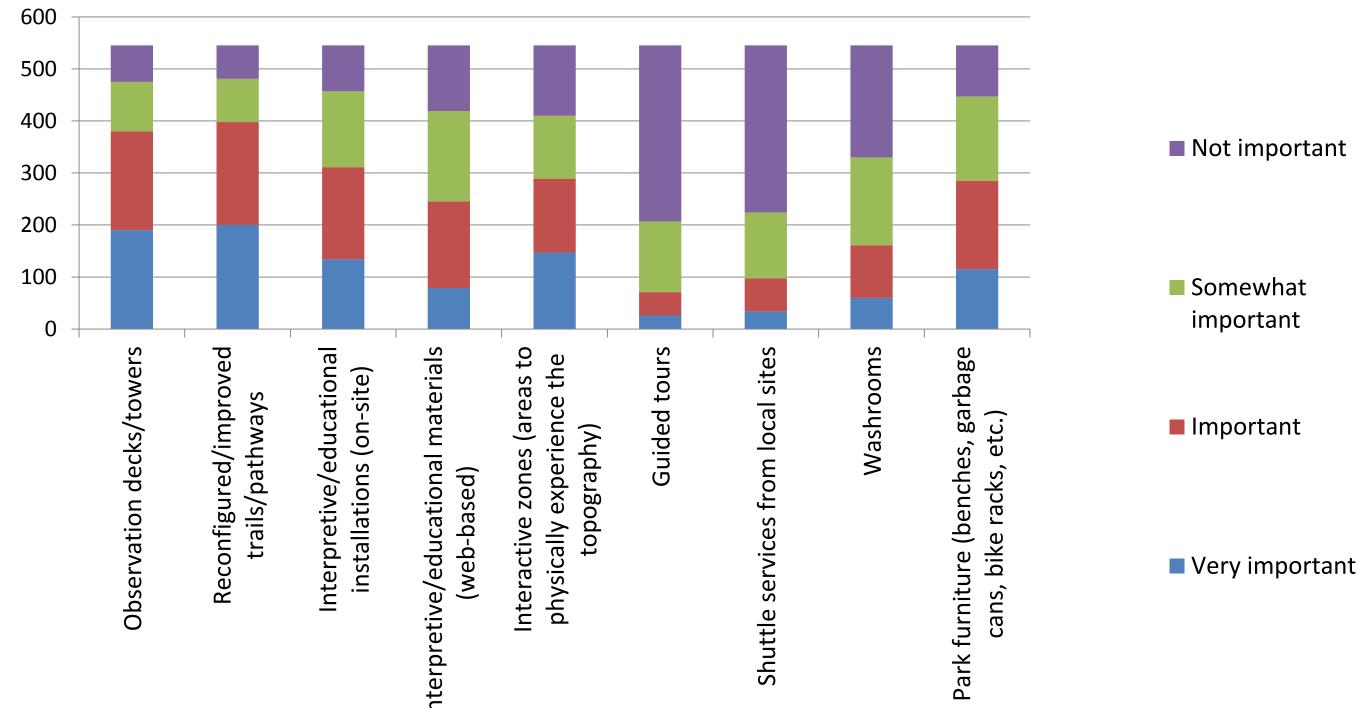
(Important or Very Important)

- Reconfigured/improved trails and pathways
   (73%)
- 2. Observation decks/tower (70%)
- 3. Interpretive/educational installations (on-site) (57%)
- 4. Interactive zones (53%)
- 5. Park furniture (benches, garbage cans, bike racks) (52%)

# Willingness to visit if access to Badlands was limited to viewing

- Yes (63%)
- No (17%)
- Unsure (20%)

To support visitation to the Cheltenham Badlands in the future while mitigating safety and conservation issues, some human intervention on the property will be required. Please rate the importance of the amenities below in regard to inclusion in the final plan.



#### Willingness to pay or donate to access the site

- Yes (68%)
  - \$5 or less (49%)
  - \$5 \$10 (15%)
- No (32%)



