



Strength. Performance. Passion.

Paris Pit CAP

September 25, 2012

Agenda

Introductions

Minutes from Last Meeting

Dufferin Paris Pit - General Update

Holcim Environment Initiatives

Technical Information on Ecology

- What is ecology

- Background and field work

- Gilbert Creek

- Paris environmental enhancements

General Discussion

Next Steps



Discussion on Ecology

The questions and concerns related to ecology are summarized to date:

1. How will the general ecology around the site be protected?
2. What will you do to protect/improve the existing environmental landscape?
3. Will extraction have an affect on Gilbert Creek or the pond?
4. How do you ensure that wild life can migrate through your site?

Additional questions are expected and welcome.

As a resource intense industry, Dufferin Aggregates and Holcim are committed to minimizing our ecological footprint

Dufferin Update - Communications Since Last CAP Meeting

Public Information Session: Listening to the Community

- A public meeting was held on July 4th as an opportunity for the community to express their questions and concerns.
 - ▶ Meeting presentation and notes are available on our website www.dufferinparispit.com
 - ▶ We compiled questions from the meeting and posted an FAQ section to our website that we continue to update as we receive additional questions:
<http://www.dufferinparispit.com/en/listening/frequentlyaskedquestions.asp>

Request from the Concerned Citizens of Brant County

- CCOB requested a copy of the site plans. Provided August 21st.
 - ▶ The site plan will likely change again with the proposed new site entrance. At that time, we can bring a copy of the revised site plans to the CAP meeting.

MNR Letter: *No requirement to re-open the licence*

- The Minister of Natural Resources sent a letter to the County on August 16th indicating there is no requirement for a licence to be reopened for review.
- The Minister encouraged the County to continue working with Dufferin and the CAP to address concerns develop solutions

Dufferin Update - Communications Since Last CAP Meeting

Site Plan Amendment: *Re-location of Pit Entrance*

- In May 2012 Dufferin applied to the MNR to relocate the pit entrance.
- The application was posted on the EBR for public comment period from June 13th to August 13th
- The MNR will consider any comments prior to making a decision
- Expect decision in early October



Permit to Take Water: *Upcoming Milestone*

- Ongoing technical work still being completed
- Dufferin will be filing PTTW to MOE in 2012
- Copy of application will be provided to County, MNR, and the CAP

Holcim Environmental Initiatives – IUCN Biodiversity Management

- Biodiversity is a part of our long term global business strategy
- Global partnership with the ***International Union for the Conservation of Nature (IUCN)*** helps us develop a world class approach to biodiversity management.
- The main objective of the ***Biodiversity Management System (BMS)*** is to ***provide tools and guidance*** to ensure that biodiversity issues are systematically identified and appropriately managed across all the stages of the extraction sites.
- To learn more about our partnership with IUCN:
 - ▶ <http://www.youtube.com/watch?v=thWpuDo6F44>



Holcim Environmental Initiatives - BMS

One goal of the BMS is to demonstrate the value of rehabilitation through a *science based approach* that includes *research* and *monitoring*



Holcim Environmental Initiatives – Earth Rangers

Holcim Canada's partnership with Earth Rangers to focus on migratory songbirds is an important activity within Holcim Canada's Biodiversity Strategy and CSR objectives:

- Earth Rangers is a national award-winning, non-profit organization focused on communicating the importance of biodiversity to children. Earth Rangers educates, inspires and engages over one million children each year to take action to protect endangered animals and the wild spaces they need to survive.
- In 2012 the partnership with Earth Rangers will include:
 - ▶ HCA sponsorship of a restoration project and species through the BBtW program (a migratory songbird found on HCA sites);
 - ▶ Expert advice from Earth Rangers on improving biodiversity of natural and rehabilitated areas at our sites;
 - ▶ Earth Ranger shows at 3 HCA Open Houses;
 - ▶ Education geared at youth about how aggregates are used to build the communities we live in and how we rehabilitate our pits and quarries; and,
 - ▶ Internal and external volunteer opportunities.
- This partnership will be announced to the public in September

Holcim Environmental Initiatives – Bird Studies Canada / Couchiching Conservancy

The monitoring completed in 2012 with Bird Studies Canada and Couchiching Conservancy has resulted in the identification of more than 115 different bird species on Holcim's sensitive sites



Technical Discussion on Ecology

Mark Cece and Alexander Stettler, MMM Group and Bill Galloway, Dufferin

1. Ecology 101
2. Standard Review Practices
3. Fieldwork at the Paris Site
4. Gilbert Creek
5. Working with the Community

Ecology 101

What is ecology?

- Ecology examines the relationship of organisms to one another and to their physical surroundings.

What do ecologists look for?

- Identify Natural Heritage Features on or within 120m of the proposed site
 - ▶ This distance requirement is stipulated in the current Aggregate Resources Act
- Natural Heritage Features include: significant wetlands, significant portions of habitat of endangered or threatened species, fish habitat, significant woodlands, significant valleylands, significant wildlife habitat, significant areas of natural or scientific interest.

How do ecologists do their work?

- Natural Heritage Features requires a review of background data as well as site specific field investigations.

Standard Review Practices for Fieldwork

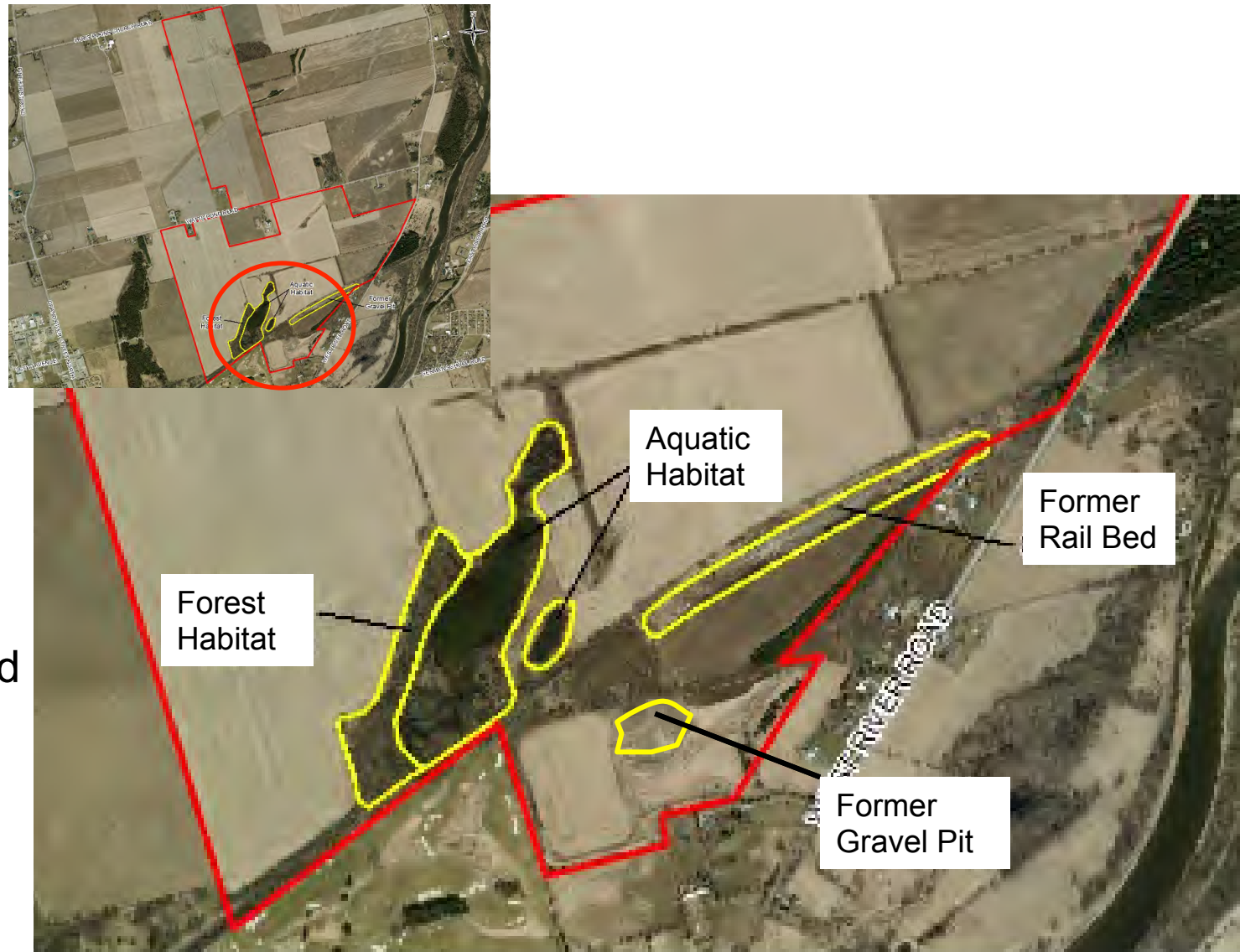
- To understand the Natural Heritage Features on any site, field investigations are required.
- Staff with technical experience undertake specific field investigations that are seasonally dependent.
- Field programs are dependent upon the site and potential species/habitats present; however, standard review practices include:
 - Vegetation during the spring, summer and fall using the Ecological Land Classification System for Southern Ontario.
 - Fish community and habitat investigations in the spring and summer to document habitat function and use during high and low water flow periods
 - Spring Amphibian calling surveys
 - Spring Breeding bird surveys
 - Reptile surveys

Paris Pit Site: Natural Heritage Features

Paris Pit site consists mainly of agricultural fields. Onsite features include:

1. Aquatic Habitat
2. Forest Habitat
3. Former gravel pit

Gilbert Creek and the Grand River are located beyond 200m from the site boundary.



Fieldwork at the Paris Pit Site

Based on the review of background data as well as fieldwork undertaken to date, the following has been identified on the Paris Pit site:

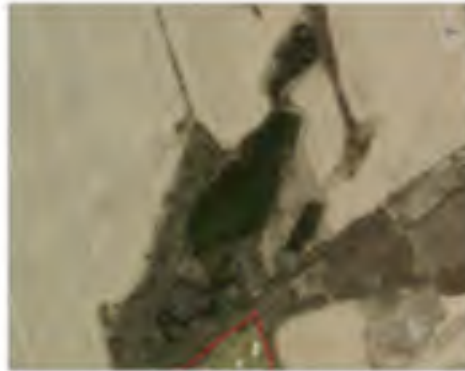
- NO Provincially significant wetlands
- NO identified significant Valleylands, as per Brant County Official Plan
- NO Area of Natural and Scientific Interest, as per provincial designation
- Fish habitat
 - ▶ NO fish captured within the two ponds on site, indicating the ponds do not function as direct fish habitat.
 - ▶ NO connection to downstream watercourses observed during low water flow season
- Significant woodlands – woodland greater than 4 ha in size mapped in Brant County Official Plan

Ecologist fieldwork ongoing and upcoming through 2013:

- Significant Wildlife Habitat – work underway

Aquatic Habitat - Ponds at South End of Property

- Outside limit of extraction
- Water levels in pond fluctuate seasonally. Observations from 2012:
 - Flooded in Spring
 - Nearly dry in Summer
- Common species identified
- No fish encountered



March, 2012



September, 2012



September, 2012

Aquatic Habitat - Ponds at South End of Property

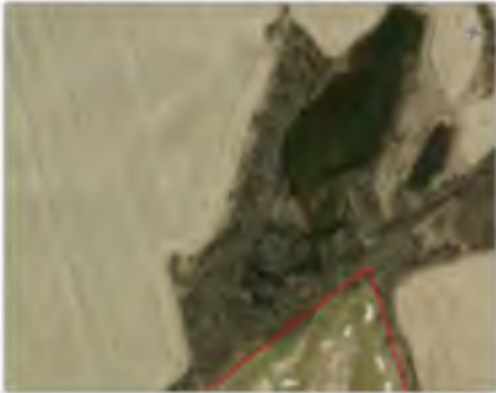


March, 2012



September, 2012

Forest Habitat: Outside the Limit of Extraction



September, 2012

- Large mature White Oak (~100 cm dbh) with mid-aged Black Cherry and a highly disturbed ground flora
- Evidence of use by common wildlife species (*coyote, raccoon, deer, squirrel, skunk, chipmunk, American Toad, Garter Snake, Blue Jay, American Robin*)
- Small recreational bike course present



Former Gravel Pit/Rail Bed: Operational Prior to Dufferin Ownership



September, 2012

- Located on the south side of the existing railroad bed
- Recreational bike activity observed

Agency Consultation and Field Work

To guide field work MMM consulted with the following agencies:

- **Ministry of Natural Resources (MNR)**
 - ▶ Gilbert Creek PSW map
 - ▶ Wetland Mapping (Land Information Ontario)
 - ▶ Species-at-Risk (SAR) list for Brant County
- **Grand River Conservation Authority (GRCA)**
 - ▶ Regulated Area Boundary Limit
 - ▶ Watercourse mapping
- **Fisheries and Oceans Canada (DFO)**
 - ▶ Provided mapping of fish habitat

Field Work Ongoing:

- ▶ Vegetation
- ▶ Fish
- ▶ Pond survey

Field Work Upcoming:

- ▶ Reptiles
- ▶ Birds
- ▶ Wildlife
- ▶ Amphibians

Gilbert Creek – Outside Limit of Extraction

MNR Provincially Significant Wetland (PSW) Evaluation and Gilbert Creek sub-Watershed Study

- ▶ Cold water stream that flows south to the Grand River
- ▶ Support trout and provides locally significant spawning and nursery habitat
- ▶ Gilbert Creek Swamp Complex is a PSW along Gilbert Creek

MMM Field Observations

- ▶ PSW is +/- 200m – 400m from the property boundary
- ▶ Gilbert Creek originates within the PSW
- ▶ Gilbert Creek and the PSW do NOT appear to be connected by surface water to the aquatic features within the Paris Pit site
- ▶ Narrow vegetated connection between the PSW and the Paris Pit site exists along rail line

CRA Hydrogeologist Observations

- ▶ We expect no impact to the Gilbert Creek Swamp as ground water flow direction is toward the south east.
- ▶ Ongoing monitoring

Environmental Enhancements – Working with the Community

- Existing environmental issues and concerns raised by community are all outside the limit of extraction
- Dufferin is committed to ongoing monitoring, tracking and benchmarking of the surrounding natural environment to confirm no impact
- Dufferin has extensive expertise enhancing and protecting natural environmental features adjacent to aggregate operations. **The Paris Pit operations plan and monitoring program will be designed and implemented with the same care and best practices as with all Dufferin operations.**
- Enhancements could include:
 - ▶ Setbacks, enhancement plantings and natural protections
 - ▶ Planting tree with native species

Holcim Environmental Initiatives – Rehabilitation Experience



Milton Quarry Progressive Rehabilitation:

- 170 ha of lakes, wetlands, woodlots and meadow.
- More than 120,000 native trees planted.

Holcim Environmental Initiatives – Rehabilitation Experience



Whistle Bare Pit – progressive rehabilitation to agriculture



Discussion

- As we work to complete our ecology fieldwork we will continue to report back to CAP members.
- With the information we have to date, we've tried to answer the questions and concerns as we understood them.
- Additional questions are welcome.

Next Steps

- Communicate MNR decision on relocation of Pit entrance
- Submit application to MOE for Permit To Take Water
 - ▶ EBR public comment period
- Continue to liaise with public through Community Advisory Panel
 - ▶ Next CAP meeting suggested dates: October 23rd or 30th
 - Potential Topic: Detail Site Plan Review
 - Consider November/December CAP meeting on PTTW if available
- Continue to listen to community concerns
 - ▶ Schedule next public meeting later in year



Dufferin
Aggregates

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