



15.0 Nature Area Management Categories

Individual management plans set out the site-specific approach to management, including what activities or uses may be appropriate and where they can occur. Management categories have been prepared to ensure a consistent approach to management plan preparation, provide clear direction on permitted use(s), and to assist in meeting the goals of the Nature Areas. The Nature Area management categories have been prepared to support the Nature Area goals presented in **Section 12** and in consultation with the Nature Areas Stewardship Advisory Committee.

Application of the management categories within Nature Area management plans should be done in consideration of the following:

- The categories represent the management objective, not the current land cover.
- Categories do not overlap.
- A feature may include multiple management categories (e.g., a forest may include areas identified as preservation and others as conservation to reflect a balanced approach to achieving the goals for the Nature Areas).

- Not all management categories will be appropriate or used in each Nature Area.
- Categories must be applied in a way that permits activities that align with the goals of the Nature Areas balanced with the goals associated with biodiversity and protection.
- Delineation of the management category should be informed by:
 - The system level plan (e.g., targets, priorities)
 - Site-specific assessment of:
 - Feature / area sensitivity
 - Current uses and deficiencies
 - Opportunities presented (e.g., restoration / enhancement)

Four management categories have been defined:

Ecological Reserve | protection and biodiversity are primary priorities.

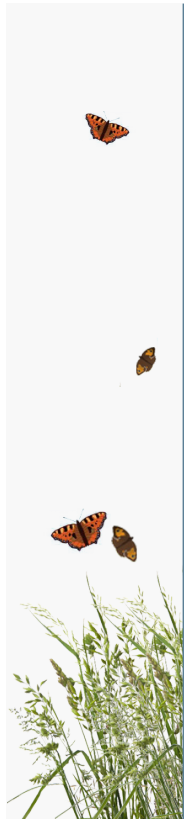
Conservation Area | protection and biodiversity priorities are balanced with passive recreational and other human uses as guided / informed by site-specific conditions.

Cultural Area | protection of cultural resources is prioritized in a natural setting.

Regenerative Agriculture | regenerative agricultural uses are supported.

Because these categories are based on management objectives, restoration and enhancement opportunities are embedded within the categories. It is recommended that areas identified as suitable opportunities for restoration / enhancement be mapped separately from the management categories (e.g., as an overlay or a separate map) to clearly identify these areas and inform implementation of the management plan.

The management categories also provide opportunities to support the UGN themes of a robust, connected system of natural areas and open spaces, integrated environmental resilience, environmental stewardship and management, and striving for net benefit.



The Net Benefit objective may be supported through a range of activities and actions within the management plans:

- Alterations to trail alignments, decreased density or removal of trails to reduce impacts (compared to existing conditions);
- Restoration and enhancement opportunities such as habitat creation, management (e.g., grasslands, invasive species), increasing habitat diversity or complexity, habitat features (e.g., turtle nesting mounds);
- Educational and stewardship opportunities (e.g., signage, events).



Source: Brian Lasenby, Shutterstock.

Universal Uses



There shall be soft management and/or low levels of manipulation / alteration of Nature Areas consistent with the objective of sustaining a high degree of habitat diversity and biodiversity at the systems-level. As a rule, natural ecological processes will regulate the character of Nature Areas.

The following are uses / activities generally permitted throughout the Nature Areas:

- Activities which protect or enhance natural heritage features and functions;
- Academic research, teaching and outdoor education (with some restrictions);
- Management of exotic and / or invasive plant species;
- Restoration and enhancement projects; and
- Indigenous traditional uses, teaching and knowledge sharing activities.

Although the above activities are generally permitted across all management categories, it is not the intention that all areas are appropriate for these activities or at the same level of intensity; site-specific conditions will inform recommendations and implementation. Further direction is provided.



Activities and Uses

To achieve the goals set out for the Nature Areas, general guidelines and accepted uses for the protection and management of the Nature Areas are described below:

- Use of ice melting and/or traction aids will be minimized and restricted to areas of key safety concern (e.g., parking areas). Materials used for this purpose will be ecologically sensitive products (i.e., no salt).
- Management, stewardship planning, and actions will comply with applicable policies, legislation, and regulations.
- Nature protection will be supported by research, monitoring, and public education.
- There shall be no removal of plants and animals, including wildflowers and edible plants, except as undertaken by Trent University Facilities Management with advice from the Nature Areas Stewardship Advisory Committee and in compliance with applicable policies, legislation and regulations for management, research or teaching purposes. Indigenous traditional uses are exempt.
- If a Nature Area is being degraded biologically or physically by overuse, management will be adaptive to respond to these concerns and could include alterations in allowable use.
- Any restoration or naturalization activities will be undertaken only with native species and environmental manipulation will be minimized.

- Exotic and/or invasive species (plant, animal) will be controlled where feasible / appropriate.
- Plant diseases and insect infestations (non-invasives) will not be controlled by pesticides or other means unless they threaten adjacent properties, infrastructure or human health and safety.
- Chemical spraying of pests and weeds will be minimized or prohibited except for limited specific needs around hazardous conditions (e.g., giant hogweed).
- There shall be no cutting of wood other than for sustainable forest management, educational or research purposes, vegetation management and trail maintenance purposes, unless undertaken by Facilities Management with advice from the Nature Areas Stewardship Advisory Committee.
- No commercial mineral exploration or extraction will be permitted.
- There shall be no lighting of fires in Nature Areas except as undertaken by Facilities Management or for Indigenous ceremonial uses and any fires are to be in accordance with any local fire bylaws or condition bans.



Teaching, Research and Outdoor Education

Academic research, teaching, and outdoor education are encouraged as part of Nature Area goals established under Section 12. Accordingly, the Nature Areas shall generally be available, with prior permission from Facilities Management and advised by the Nature Areas Stewardship Advisory Committee, for education purposes by Trent University, and where appropriate, schools, public organizations, and nature-based groups,

with some restrictions (e.g., location, equipment, class sizes, etc.) based on management categories, as described in proceeding section(s). Research must be consistent with the policies for Nature Areas and specific management prescriptions. Research which contributes to the understanding and appropriate management of Nature Areas is encouraged. Further, research results and publications must be shared with Facilities Management and the Nature Areas Stewardship Advisory Committee for consideration in ongoing management objectives.



Dogs

In preparing the Trent Lands and Nature Areas Plan, we heard from the community that they value the opportunity to walk their dogs in the Nature Areas. However, it is also well documented that running and barking dogs can significantly disturb and interfere with wildlife (e.g., as ground-nesting birds, create conflicts with other users, and reduce the opportunity for other users to view wildlife). Particularly, unleashed dogs may be intimidating to trail users, especially for individuals and families with small children. Another irritation to trail users is the frequent occurrence of dog feces on trails and around parking lots. In addition to being malodorous and interfering with walking and skiing, dog feces are a potential health hazard.

Given the tension between the benefits to individuals from walking with their dogs, and the impact to the natural environment, dog walking in the Nature Areas remains a challenge to be addressed through the next level of planning, informed by site-specific conditions and consideration for each nature area. Dogs may be permitted in some Nature Areas if a suitable location can be identified that addresses the environmental concerns. Some preliminary consideration has been given to dog use within each management category; however, final decisions regarding dogs and dog use will occur through site-specific planning activities.



Recreation

The Nature Areas are used for a variety of recreational purposes by the Trent University community and members of the Peterborough and area community. Opportunities for outdoor recreation must be consistent with the policies set for the Nature Areas and the management prescription of each area. Activities must be non-motorized and may include walking, hiking, jogging, orienteering, cross-country skiing, snowshoeing, tobogganing, birdwatching, nature appreciation and photography.

Throughout the Nature Areas, there shall be no motorized vehicles, including snowmobiles and all-terrain vehicles, except for emergency and for maintenance purposes as authorized by the University. Certain forms of non-motorized recreation may also be prohibited, depending on specific management considerations or where the activity could affect ongoing research. Hunting is prohibited in Nature Areas with the exception of traditional treaty rights. Fishing is permitted in accordance with applicable laws and regulations. Camping, campfires or overnight use is prohibited except when authorized as part of an approved academic use. Permission for sporting or organized events (e.g., orienteering events) must be sought from Facilities Management, informed by advice from the Nature Areas Stewardship Advisory Committee.

Users of Nature Areas shall pack out their garbage, as garbage cans usually will be provided only at trailheads. The amount and impacts of recreational use shall be monitored to ensure protection of the environment, the provision of high-quality recreation experiences, and to guide management. Recreation in areas which are determined to suffer from ‘over-use’ may be restricted or prohibited for a period of time or permanently. Recreational trails and areas represent opportunities for education through signage and other materials. These can include panels or signs which speak to one or more of the following:

- Permitted and prohibited uses and supporting rationale to encourage appropriate use and stewardship.
- Ecological sensitivities, key features, species, etc.
- History of the land (natural, Indigenous, etc.).
- Directional signage to enhance safety and use.





Category-Specific Direction

Ecological Reserve



Conservation Area



Cultural Area



Regenerative Agricultural Area



Each management category has a specific focus which collectively are intended to provide balance between ecological (e.g., biodiversity) and cultural (e.g., educational/ teaching, research, recreation, Indigenous) values and goals. Together, across the Trent Nature Areas and as informed by the system-level plan, the categories are to be implemented to achieve a balance between these uses.

The following section provides a more detailed description of each management category and provides specific guidance for permitted uses within each category.

Ecological Reserve

Other Category Areas

Conservation Area



Cultural Area



Regenerative Agricultural Area



What are the priorities?



Natural Heritage & Landforms



Biodiversity & Ecological Services



Nature Based Learning



ITK



Wellbeing & Recreation

What are Ecological Reserves?

Ecological Reserves are lands which are considered to be most sensitive to human use / impacts and / or those lands which are managed for the primary purpose of maintaining or enhancing the quality of their biophysical resources. Lands in this category are or should be returned to a natural state / condition.

This management category comprises the most important areas of natural heritage within the Symons Campus and should be managed in a way that limits or prohibits use with potential to negatively impact them. The main priority is for the preservation or enhancement of habitats, providing habitat for SAR, biodiversity, etc. The size of the Ecological Reserve should be sufficient to ensure that natural features can be protected and remain viable over the long-term. Influence of climate change should be considered in the identification and delineation of this category. While this category will include significant (per policy directives) features (e.g., significant woodlands) it is not required or implied that it necessarily capture them in their entirety. Some portions of significant features may be suitable for other categories (e.g., Conservation Areas) which allows for a balance of use to allow the Nature Area to meet the range of goals for of the Nature Areas. Policy protections for features are recognized and will be upheld (e.g., no negative impact per the PPS).

Summary of Features or Functions:

- Significant features (provincially or regionally);
- Sensitive features, habitats or species (e.g., area sensitive birds, seepage areas);
- Features and / or habitats which currently support or have potential to support Species at Risk (SAR) (e.g., through restoration / enhancement);
- Representative habitats identified for preservation to protect biodiversity;
- Areas unique to the Symons Campus;
- The best example(s) of a biological or physical feature of interest with the Nature Areas; and
- Restoration and enhancement areas (existing or proposed).

Goals supported include:

Protect and where possible, enhance important natural heritage features and functions, exemplar landform features and processes through a systems-based approach to management.

Encourage the appropriate use of the Nature Areas for academic research and teaching, in consultation with the Nature Areas Stewardship Advisory Committee.

Recognize and protect important Indigenous values within the Nature Areas.

Acknowledge the role of the Nature Area in conserving biodiversity, providing ecological services in local adaptation to, and mitigation of climate change.

Bolster Trent University as an institution of higher learning and as an institution caring for nature, the environment, and Indigenous teachings and ways of knowing.

Category-Specific Direction:**Teaching, Research and Outdoor Education**

Academic research and teaching are permitted in areas identified in consultation with the Nature Areas Stewardship Advisory Committee. Considering the sensitive nature of some features encompassed within Ecological Reserves, limits with regards to areal and temporal extent, impact and use of equipment, number of people, etc., may apply.

**Recreation**

Recreation will be restricted or prohibited depending on feature sensitivity. This may require the closure of some existing trails, realignment of existing trails to less sensitive areas, restrictions on additional trail length, management of ad hoc trail development, and likewise management / restriction of public access. These limitations are in-line with the objectives specific to this management category in order to preserve biological form and function.

**Dogs**

Dogs (as well as other pets or domestic animals) are prohibited from Ecological Reserves. Signage should be considered at public access point(s) identifying the areas as ecologically sensitive and describing the ecological impacts of dogs to educate users and discourage inappropriate use. Signage should also provide direction to dog-friendly alternative areas. Enforcement efforts should be considered with assistance from appropriate authorities, if required.

Exceptions can be made for service animals that accompany those participating in teaching, learning and research activities.

**General Management**

New footprints for structures or amenities shall not be permitted.

Conservation Area

Other Category Areas

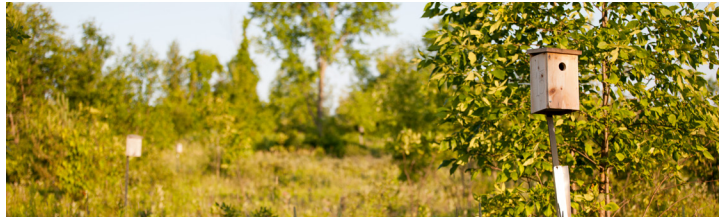
Ecological Reserve



Cultural Area



Regenerative Agricultural Area



What are the priorities?



Natural Heritage & Landforms



Biodiversity & Ecological Services



Nature Based Learning



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Wellbeing & Recreation

What are Conservation Areas?

The Conservation Area category is intended to provide a balance between natural heritage and other goals (e.g., recreation, teaching) for the Nature Areas. This does not indicate or imply that the lands managed under this category are available for human use without restriction, or at a consistent or specified level of intensity. Determinations of uses (e.g., trails) and how much use is appropriate are made on a site-specific basis. Lands in this category are predominantly or will be returned to a predominantly natural state / condition. This management category recognizes the function of a network of natural heritage features within the Symons Campus, but also provides focus on nature appreciation, teaching, and sustainable recreation. The primary management objective is to maintain or enhance the quality of the Nature Area while promoting recreation and education. Generally, this category will include features or areas that are more tolerant to some level of human activity. The area must be suitable for some level of recreational uses (non-motorized, passive) and / or nature appreciation activities. The amount or intensity of uses (e.g., density of trails, types of uses) are assessed and established through the management plan for an individual Nature Area. Policy based feature protections are recognized and will be upheld (e.g., no negative impact per the PPS).

Goals supported include:

Protect and where possible, enhance important natural heritage features and functions, exemplar landform features and processes through a systems-based approach to management.

Recognize and protect important Indigenous values within the Nature Areas.

Acknowledge the role of the Nature Area in conserving biodiversity, providing ecological services in local adaptation to, and mitigation of climate change.

Encourage use of the Nature Areas for academic research, teaching, outdoor education and (passive, non-motorized) recreation that is consistent with the policies and intent set out in this Plan.

Promote Indigenous Traditional Knowledge sharing and teaching, ceremonies, nature interpretation.

Understand and promote physical and psychological benefits and opportunities presented by the Nature Areas.

Encourage and enable positive interactions between the public and the University through shared experience in and stewardship of the Nature Areas.

Provide low impact structures (e.g., open air teaching shelter) or amenities consistent with the uses and policies of this Stewardship Plan and to further the goals of the Nature Areas.

Enhance the reputation of Trent University as an institution of higher learning and as an institution.

Summary of Features or Functions:

- Significant features (provincially or regionally);
- Other natural heritage features / areas;
- Semi-natural or naturalizing features and areas;
- Restoration areas (current or planned); and
- Buffers to natural heritage features as established through land use planning activities (e.g., through an Environmental Impact Study). This management category recognizes the function of a network of natural heritage features within the Symons Campus, but also provides focus on nature appreciation, teaching, and sustainable recreation. The primary management objective is to maintain or enhance the quality of the Nature Area while promoting recreation and education.

Category-Specific Direction:**Teaching, Research and Outdoor Education**

Academic research and teaching will be allowed and at a generally increased intensity in comparison with Ecological Reserves (e.g., increased footprint, equipment, frequency, etc.). However, all activities remain subject to approval by the University.

**Dogs**

Dogs may be permitted in some conservation areas through the creation of a management plan that determines suitability of this use, and a plan to ensure safety for other users and the natural environment. With respect to dog use, areas within the Conservation Area category may be identified as follows:

- Dogs permitted – Leash optional
- Dogs permitted – Leash mandatory
- Dogs not permitted

Clear signage should be installed at public access points describing applicable dog use policies and markers at trail intersections or other appropriate junctures to delineate where allowable use changes. Where dog use is not permitted, signage should be posted to inform users of the ecological impacts of dogs (in order to discourage use, where applicable) with direction to dog-friendly alternative areas (e.g., a map). Enforcement efforts should be considered with assistance from appropriate authorities, if required.

**Recreation**

Low-intensity, non-motorized, day use recreational activities will be generally permissible with appropriate siting and trail network design. Activities are to occur on-trail unless specifically approved by The University in advance (e.g., an orienteering event).

**General Management**

Structures and amenities within Conservation Area category areas are generally limited to basic services such as small parking areas (for use of the Nature Areas only), teaching shelters (e.g., open air shelter), benches, toilets, signage, and trail networks. The construction of new low impact structures and amenity areas will be considered based appropriate siting process(es) to ensure consistency with policies and that impacts do not jeopardize the form and function of natural heritage features. Siting of any proposed structure or amenity must be done in consideration of site conditions, sensitivities, avoidance or where avoidance is not possible minimization and mitigation of potential negative impacts (e.g., through design, compensation, etc.). Any proposed activity must be undertaken in accordance with applicable laws (e.g., Endangered Species Act 2007), regulations (e.g., Ontario Regulation 167/06 Otonabee Region Conservation Authority: Regulation of development, interference with wetlands and alterations to shorelines and watercourses), and policies (e.g., Provincial Policy Statement, City of Peterborough Official Plan).

Cultural Area

Other Category Areas

Ecological Reserve



Conservation Area



Regenerative Agricultural Area



What are the priorities?



Natural Heritage & Landforms



Biodiversity & Ecological Services



Nature Based Learning



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Wellbeing & Recreation

What are Cultural Areas?

Cultural Areas identify lands whose importance within the Nature Areas is primarily driven by cultural values or considerations. These areas are primarily managed for their cultural importance with consideration given to ecologically supportive or compatible approaches to management. These areas may or may not consist of natural vegetation cover. Policy based feature protections are recognized and will be upheld (e.g., no negative impact per the PPS). Evidence of cultural history and transition of land from formerly cleared and agricultural uses to a return to natural areas remains evident throughout the Nature Areas (e.g., fence rows, remains of buildings, etc.) These small traces often do not warrant a management category, but their presence and value to teaching at the University should be recognized and may inform interpretive signage and trails to allow continued access to these features, as appropriate.

Goals supported include:

Recognize and protect important Indigenous values within the Nature Areas.

Encourage use of the Nature Areas for academic research, teaching, outdoor education and (passive, non-motorized) recreation.

Promote Indigenous Traditional Knowledge sharing and teaching, ceremonies, nature interpretation.

Understand and promote physical and psychological benefits and opportunities presented by the Nature Areas.

Foster understanding, appreciation, and shared responsibility for the natural environment.

Encourage and enable positive interactions between the public and the University through shared experience in and stewardship of the Nature Areas.

Provide low impact structures (e.g., open air teaching shelter) or amenities consistent with the uses and policies of this Stewardship Plan and to further the goals of the Nature Areas.

Enhance the reputation of Trent University as an institution.

Summary of Features or Functions:

- Indigenous traditional or cultural sites and areas;
- Areas of archaeological significance;
- Teaching / gathering areas;
- Educational / interpretive areas and facilities; and
- Pollinator, medicinal or education gardens.

Category-Specific Direction:**Teaching, Research and Outdoor Education**

Academic research and teaching will generally be allowed in consideration of cultural values for which the area is identified, where appropriate; however, remains subject to approval by the University.

**Recreation**

Low-intensity, non-motorized, day use recreational activities will be generally permissible with appropriate siting and trail network design.

**Dogs**

Dogs may be permitted in some cultural areas through the creation of a management plan that determines suitability of this use, and a plan to ensure safety for other users and the natural environment. With respect to dog use, options are identified as follows:

- Dogs permitted – Leash optional
- Dogs permitted – Leash mandatory
- Dogs not permitted

Clear signage should be installed at public access points describing applicable dog use policies and markers at trail intersections or other appropriate junctures to delineate where allowable use changes. Where dog use is not permitted, signage should be posted to inform users of the ecological impacts of dogs (in order to discourage use, where applicable) with direction to dog-friendly alternative areas (e.g., a map). Enforcement efforts should be considered with assistance from appropriate authorities, if required.

**General Management**

Sites with high cultural value will be protected or managed to support the value for which they have been identified. This can include public exclusions from sites that contain especially rare, valuable, fragile, or dangerous artifacts, trails or paths to encourage exploration, ongoing management of vegetation to protect or enhance the cultural site / value, and / or signage to inform and educate.

Indigenous Traditional Knowledge sharing and teaching, ceremonies, and nature interpretation are promoted across all categories. If and where appropriate, Cultural Area sites may be identified to facilitate establishment of a site for Indigenous use and teaching (e.g., medicinal garden). For sites with high indigenous cultural value, engagement with the Elders and Traditional Knowledge Keepers Council and the Michi Saagiig Consultation Liaisons will help inform decisions around access and use.

Structures or amenities are generally limited to basic services such as small parking areas (for Nature Area use only), teaching shelters (e.g., open air shelter), benches, toilets, signage, and trail networks. The construction of new low impact structures and amenity areas will be considered based appropriate siting process(es) to ensure consistency with policies and that impacts do not jeopardize the form and function of natural heritage features. Siting of any proposed structure or amenity must be done in consideration of site conditions, sensitivities, avoidance or where avoidance is not possible minimization and mitigation of potential negative impacts (e.g., through design, compensation, etc.). Any proposed activity must be undertaken in accordance with applicable laws, regulations, and policies.

Regenerative Agricultural Area

Other Category Areas

Ecological Reserve



Conservation Area



Cultural Area



What are the priorities?



Natural Heritage & Landforms



Biodiversity & Ecological Services



Nature Based Learning



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Wellbeing & Recreation

What are Regenerative Agriculture Areas?

This management category encompasses lands currently used for agricultural use with the intent to support regenerative agricultural practices within the context of the Nature Areas (i.e., not intended for land clearing). Several parcels of land in the eastern half of the Wildlife Sanctuary Nature Area and the Ninth Line Nature Area are leased by farmers and are currently under cultivation or are grazed. Over the long-term, where agriculture is identified to continue, practices are to shift to regenerative agricultural practices to ensure management and use is aligned with the goals and objectives of the Nature Areas. Agriculture and food production, and conservation of natural areas have been prominent themes in consultation for the TLNAP. Dialogue regarding the role of regenerative agriculture and more broadly agricultural lands within the Nature Areas will continue beyond the release of the TLNAP. Decisions regarding agriculture within the Nature Areas can be addressed through processes outlined in the implementation section, and preparation of the Systems-Level Plan and Nature Area Management Plans.

Goals supported include:

Acknowledge the role of the Nature Area in conserving biodiversity, providing ecological services in local adaptation to, and mitigation of climate change.

Encourage use of the Nature Areas for academic research, teaching, outdoor education and (passive, non-motorized) recreation .

Promote positive interactions between the public and the University through shared experience.

Foster understanding, appreciation, and shared responsibility for the natural environment.

Encourage and enable positive interactions between the public and the University through shared experience in and stewardship of the Nature Areas.

Provide low impact structures (e.g., open air teaching shelter) or amenities.

Enhance the reputation of Trent University as an institution.

Summary of Features or Functions:

- Existing Agricultural Areas
- Regenerative Agriculture
- Food production
- Traditional medicine
- Pollinator habitat

Category-Specific Policies:



Teaching, Research and Outdoor Education

Academic research and teaching will be strongly encouraged subject to approval by the University.



Recreation

Low-intensity, non-motorized, day use recreational activities will be generally permissible with appropriate siting and trail network design. Limitations to recreational access may be required to avoid impacts to farm activities, however they present an opportunity for the community to engage with and explore sustainable agricultural practices.



Dogs

Dogs are generally not permitted. Exceptions can be made for service animals that accompany those participating in teaching, learning and research activities.



General Management

The lands are managed for the purpose of agriculture. As they occur within a Nature Area, sustainable farm practices and teaching opportunities which focus on sustainable or ecologically compatible activities are strongly encouraged. Opportunities for complementary uses may also be considered on a case-by-case basis (e.g., market garden, storage sheds, wells for irrigation).