

## Glossary of Important Terms

**MARXAN** - an acronym, fusing MARine, and SPEXAN, itself an acronym for SPatially EXplicit Annealing

**Resource value** - is synonymous with the term ecological objective and refers to the categories of what we value for inclusion within the NHS.

**Target** - the minimum requirement for a given resource value within the Natural Heritage System.

**Cost** – is the underlying value that MARXAN tries to minimize when it selects areas to achieve its targets. It is necessary to develop efficient solutions and is defined by the user at the hexagon level. Cost data does not necessarily have to be a dollar value however non financially based surrogates must spatially explicit at a scale fine enough to differentiate areas in terms of relative value. MARXAN works to achieve all of the targets (e.g., 10% of habitats) while minimizing the total cost of the system.

**Excluded** – areas that have a defined purpose that is not compatible with inclusion in the NHS and thus they must be excluded from the NHS 100% of the time.

**Preferred** – areas that have been identified as possessing characteristics that make them compatible with ecological objectives and thus they are more suitable than other areas for inclusion in the NHS.

**Available** – areas that possess no predetermined purpose and therefore are open to inclusion in the NHS.

**Conserved / Included**– areas that have a designation ensuring their protection and thus they must be included in the NHS 100% of the time.

**Socio-political constraint** – refers to the way land is currently being used and refers to its availability for inclusion in the NHS based on laws, conventions, and/or restrictions associated with levels of protection from international, federal, provincial, municipal and/or private institutions.

**Solution** – the spatial result for a particular learning scenario derived by MARXAN.

**Learning Scenarios** - a set of natural heritage system design options that include the baseline scenario, together with additional scenarios that may have one or more changes to the targets and constraints as requested by a stakeholder group. These scenarios allow the partner group to explore alternative targets or constraints to see the effect on the natural heritage system design.

**Hazard Lands** – all lands having inherent environmental hazards, such as flood susceptibility, erosion susceptibility, or any other physical condition which is severe enough to cause property damage and / or potential loss of life, if these lands were to be developed or built upon.

**Hazardous Lands** – land that could be unsafe for development because naturally occurring processes associated with flooding, erosion, dynamic beach or unstable soil or bedrock.

**PSW- Provincially Significant Wetland**

**ANSI – Area of Natural and Scientific Interest**