

GREAT SAND HILLS REGIONAL ENVIRONMENTAL STUDY

Great Sand Hills Advisory Committee
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- Appendix C. Saskatchewan Grassland Range Health Assessment.
- Appendix D. Grassland Score Sheet.
- Appendix E. Biodiversity core area characteristics and general location.
- Appendix F. Biodiversity core area identification (ID), type (upland or wetland site), and size of biodiversity core area.
- Appendix G. Land description of biodiversity core areas (SECT – section, TWP – township, RGE – range; all townships are west of the 3rd Meridian).
- Appendix H. A listing of reports produced or commissioned as part of the Regional Environmental Study.

List of Acronyms

AAFC	Agriculture and Agri-Food Canada	HRSDC	Human Resources and Social Development Canada
AEGIS	Altered Ecosystem Generalized Incremental Simulation	HIS	Habitat Suitability Index
AGCR	Crested wheatgrass	HOLA	Horned Lark
ARC	Alberta Research Council	IPCC	Intergovernmental Panel on Climate Change
BACI	Before-after-control-impact	LSD	Legal subdivision
BAIS	Baird's Sparrow	LBCU	Lon-billed Curlew
BHCO	Brown-headed Cowbird	LUPU	Small lupine
BMPs	Best management practices	MAGO	Marbled Godwit
BRIN	Smooth Brome	NGO	Non-Government Organization
CAPP	Canadian Association of Petroleum Producers	NWSEP	National Water Supply Expansion Program
CCLO	Chestnut-collared Longspur	PET	Potential evapotranspiration
CCSP	Clay-colored Sparrow	PFRA	Prairie Farm Rehabilitation Administration
CDC	Saskatchewan Conservation Data Centre	PPAs	Prime Protection Areas
CHSU	Smooth Arid Goosefoot	PP or 2P	Proven and probable gas reserves
CLUZ	Conservation Land-Use Zoning	PPP or 3P	Proven, probable and potential gas reserves
CMI	Climate Moisture Index	PPT	Precipitation
CONI	Common Nighthawk	PRVI	Chokecherry
COSEWIC	Committee on the Status of Endangered Wildlife in Canada	RAER	Representative Area Ecological Reserve
CYR	Saskatchewan Culture, Youth and Recreation	RECD	Regional and Economic Cooperative Development
DIF	Distance impact factor	REDA	Regional Economic Development Authority
EA	Environmental Assessment	RES	Regional Environmental Study
EIA	Environmental Impact Assessment	RMs	Rural Municipality
EIS	Environmental Impact Statement	RM #110	Rural Municipality of Piapot
ENGO	Environmental Non-Government Organization	RM #139	Rural Municipality of Gull Lake
EPP	Environmental Protection Plan	RM #141	Rural Municipality of Big Stick
ES1	Environmental Sensitivity Lands 1	RM #169	Rural Municipality of Pittville
ES2	Environmental Sensitivity Lands 2	RM #171	Rural Municipality of Fox Valley
GIS	Geographic Information System	RM #229	Rural Municipality of Miry Creek
GR	Saskatchewan Government Relations	RM #230	Rural Municipality of Clinworth
GRSP	Grasshopper Sparrow	RM #231	Rural Municipality of Happyland
GSH	Great Sand Hills	ROC	Receiver Operating Characteristics
GSHMA	Great Sand Hills Manufacturers Alliance	RSF	Resource Selection Functions
GSHPDC	Great Sand Hills Planning District Commission	SAC	Scientific Advisory Committee
GSH RES	Great Sand Hills Regional Environmental Study	SAF	Saskatchewan Agriculture and Food Species at Risk Act
		SARA	

SAVS	Savannah Sparrow
SCADA	Supervisory Control and Data Acquisition
SE	Saskatchewan Environment
SEA	Strategic Environmental Assessment
SHRO	Beaked annual skelton-weed
SIR	Saskatchewan Industry and Resources
SIAST	Saskatchewan Institute of Applied Science and Technology
SPIGEC	Saskatchewan Petroleum Industry/ Government Environment Committee
SPP	Summer precipitation proportion
SPPI	Sprague's Pipit
SPSS	Statistical Package for the Social Sciences
SPTO	Spotted Towhee
SWA	Saskatchewan Watershed Authority
TEACUP	Total Economic Activity under Current Productivity
TLEs	Treaty Land Entitlements
VECs	Valued Ecosystem Components
UPSA	Upland Sandpiper
VUOC	Six weeks fescue
WEDA	Western Economic Diversification
WEME	Western Meadowlark

Preface

On behalf of the Scientific Advisory Committee, we are pleased to submit the final report for the Great Sand Hills Regional Environmental Study.

Commissioned as an independent scientific authority, our mandate was to oversee the design and implementation of a Regional Environmental Study for the Great Sand Hills that focused on a strategic assessment of human activities that affect the ecological integrity or sustainability of this globally significant regional ecosystem.

This study is one of the largest, most complex, and most truly interdisciplinary research projects to be attempted for any region. Our goal was to present the methods and results in a form that is generally comprehensible and user-friendly. We acknowledge, however, that the complexity of this study made translation into common language challenging; hence, the reader will encounter some fairly technical concepts and terminology. Nevertheless, we made a concerted effort to present our recommendations clearly to policy makers and the public. Essentially, our recommendations focus on sustaining the ecological integrity of the Great Sand Hills and are grounded in the realities of natural, social and economic capital for the region. The recommendations are based on the weight of evidence from natural and social sciences studies, which consistently confirm that sustainability of human activity in the Great Sand Hills is reliant on the sustainability of ecosystem elements and processes that are not significantly perturbed by human activities. We ask that our recommendations be considered not singly but in their entirety.

While we have made every effort to insure that our recommendations take into consideration current policy and practice, it is inevitable that changes will occur that affect our recommendations. For example, in July of 2008, as proposed in the recent 2007 provincial budget, both the Large Corporation Capital Tax and Corporation Capital Tax Resource Surcharge have been proposed for elimination. Such changes will affect the impact that industry has on the region in relation to government revenues, industry perception(s) of the business climate in the region, and the on-going operating costs and associated profits of industry. In turn,

there may be a suite of impacts to the local economy. Therefore, on-going economic re-assessment and valuation—combined with social and ecological studies—are critical for continued progress toward sustaining the natural, human, and economic capital of the study area.

We greatly appreciate the commitment and contribution of the many researchers, staff, contractors, and students who participated in this intense two-year study. In developing our recommendations, we benefited from the experience and insights of numerous individuals representing a wide range of interests throughout the Great Sand Hills and beyond. We also benefited from substantial contributions contained within pre-existing studies and plans. We hope that our efforts will contribute to serving the natural, economic and social sustainability of the Great Sand Hills in perpetuity.



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