REVEGETATION WITH NATIVE SPECIES:
PUSHING NORTHERN BOUNDARIES IN MANITOBA

SASKATCHEWAN PRAIRIE CONSERVATION ACTION PLAN:
2015 NATIVE PRAIRIE RESTORATION/RECLAMATION WORKSHOP

Friday, February 13, 15
SASKATOON SASKATCHEWAN

BY:
SCATLIFF + MILLER + MURRAY INC.
URBAN NATURALIZATION: WETLAND-STYLE SRP’S AND NATIVE GRASS UPLANDS
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CONCEPT OF NATURALIZATION: RIPARIAN RESTORATION
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PRELIMINARY REVEGETATION PLANNING
Lake St. Martin Flood Emergency Channels
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Manitoba Hydro – Point du Bois Spillway Replacements
MANITOBA’S EAST SIDE TRANSPORTATION INITIATIVE (ESTI) – ALL SEASON ROAD (ASR) CONSTRUCTION TO BETTER CONNECT NORTHERN COMMUNITIES
A MAJOR MULTI-YEAR INITIATIVE MANAGED BY THE EAST SIDE ROAD AUTHORITY (ESRA)
LAND TRANSPORTATION AMONG 30 EAST SIDE COMMUNITIES IS CURRENTLY POSSIBLE ONLY BY WINTER ROADS
LAND TRANSPORTATION IS NOT RELIABLE FOR APPROXIMATELY 9 MONTHS PER YEAR ON THE EAST SIDE.
SMM’s task is to coordinate native revegetation activities on areas affected by road construction.
NATIVE GRASS REVEGETATION REQUIRES PROPER METHODOLOGY FOR EFFECTIVE LONG TERM ESTABLISHMENT
PROPERLY PLANTING NATIVE SPECIES CAN HELP MITIGATE THE SPREAD OF WEEDS IN TO WILDERNESS AREAS.

MOST SUSTAINABLE FOR APPROACH TO WEED CONTROL

1. UNDERTAKING PROPERLY TIMED AND EXECUTED WEED CONTROL MEASURES DURING OR EARLY AFTER CONSTRUCTION.

2. FOLLOWED BY SITE-APPROPRIATE PLANTING WITH COMPETITIVE NATIVE SEED MIXES

INVASION CURVE

- Detection
- Detection
- Eradication FEASIBLE
- Prevention or Eradication SIMPLE
- Land managers aware of problem
- Local control and management ONLY
- Eradication UNLIKELY, intense effort required
- Public awareness typically begins
- AREA INFESTED

TIME

- Lag Phase
- Exponential Growth
- Carrying Capacity

Invasive species control costs can dramatically increase with time
SMM determined that northern mixes would be weak using only existing commercial seed sources.
TWO-PRONGED ATTACK

1. BEGIN CAPTURE HARVEST AND SEED PRODUCTION FOR NORTHERN AREAS

2. BEGIN REVEGETATION WORK IN AREAS READY FOR REVEGETATION AND FOR WHICH CREDIBLE SEED MIXES CAN BE SOURCED
NORTHERN SEED HARVESTING FOR FARM SEED ‘INCREASE’ PRODUCTION TO SUPPLY AND STRENGTHEN NORTHERN MIXES
Capture harvested species labelled “for increase” about to be sent for professional cleaning.

Local Bloodven River residents participating in the harvest and cleaning of Sloughgrass and Bluejoint reed grass.

Drying Hairy wild rye and Fringed brome by a road side.
LOCAL YOUTH CONTINUE TO WORK WITH SMM STAFF FOR
ON VARIOUS REVEGETATION PROJECTS
WILD HARVESTED SEED PLANTED INTO CONTROLLED A PRODUCTION FIELD FOR SEED INCREASE
PLANTING OBJECTIVES: SEED SOURCING - CAPTURE HARVEST & SEED INCREASE

FIELD OF NODDING BROME FOR SEED INCREASE:
Approximately 14 lbs of pure-live seed were capture-harvested in 2011 and planted into this 4 acre increase field in spring 2012.

This 4 acre field produced over 800 lbs of nodding brome seed.
PLANTING OBJECTIVES: SEED SOURCING - CAPTURE HARVEST & SEED INCREASE

FIELD OF VIRGINIA WILD RYE FOR SEED INCREASE:

This field (photographed in 2012), produced over 600 lbs of Virginia WR seed in the fall of 2013.
PLANTING OBJECTIVES: SEED SOURCING - CAPTURE HARVEST & SEED INCREASE

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FIELD OF VIRGINIA WILD RYE FOR SEED INCREASE:
NORTHERN FIELD TRIALS CONFIRMED THE RELIABILITY OF NORTHERN SEED MIXES
BEST MANAGEMENT PRACTICE (BMP) - 'RIPPING' COMPACTED SOILS BEFORE SEEDING NATIVE GRASSES
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BEST MANAGEMENT PRACTICE (BMP) - TOP SOIL SALVAGE AND OTHER BMP'S UNDERTAKEN ON ESTIMATED WEED CONTROL SPRAYING ON SEEDED AREAS AND IN NATIVE PLANT REMNANTS WITHIN THE ROW THAT ARE ABLE TO BE SALVAGED

Seeded Abandoned Road

Remnant site identified for a broadleaf spray - sweet clover control

Weed control contractor
SITES NOT READY FOR PLANTING WERE SEEDED TO A FULL FIELD RATE OF OATS TO HELP MITIGATE EROSION
TECHNOLOGY TRANSFER - TRAINING ESRA STAFF AND CONTRACTORS ON THE OPERATION OF NATIVE GRASS SEEDING EQUIPMENT.
SEEDING YEAR - S+M+M USES SCIENCE-BASED ASSESSMENT PROTOCOL TO DETERMINE SEEDLING ESTABLISHMENT
FIRST YEAR AFTER NATIVE REVEGETATION;

NEW ALL SEASON ROAD ON LEFT

REVEGETATED ABANDONED ROAD ON RIGHT
A RESEEDED SEGMENT IN ITS 2ND YEAR AFTER SEEDING; NO WEEDS PRESENT
VEGETATION WORK HAS BEEN INITIATED OR COMPLETED ON 10 MAJOR BETWEEN ROAD AND BRIDGE CONTRACTS BETWEEN HOLLOW WATER FIRST NATION AND BERENS RIVER
FIRST YEAR AFTER SEEDING - NORTHWARD BOUND