Ducks Unlimited, Inc.

North Dakota Aquatic Resource In-lieu Fee Program

November 27, 2013

MITIGATION ECOLOGICAL SERVICES

Purpose

The Ducks Unlimited – North Dakota In-Lieu Fee (DU-ND-ILF) program will operate as an umbrella ILF program in six (6) different service areas in North Dakota. The DU-ND-ILF program will provide a third-party compensatory mitigation option for unavoidable impacts to waters of the United States (including wetlands and streams, e.g. aquatic resources) approved by the Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act ("CWA") and section 10 of the Rivers and Harbors Act.

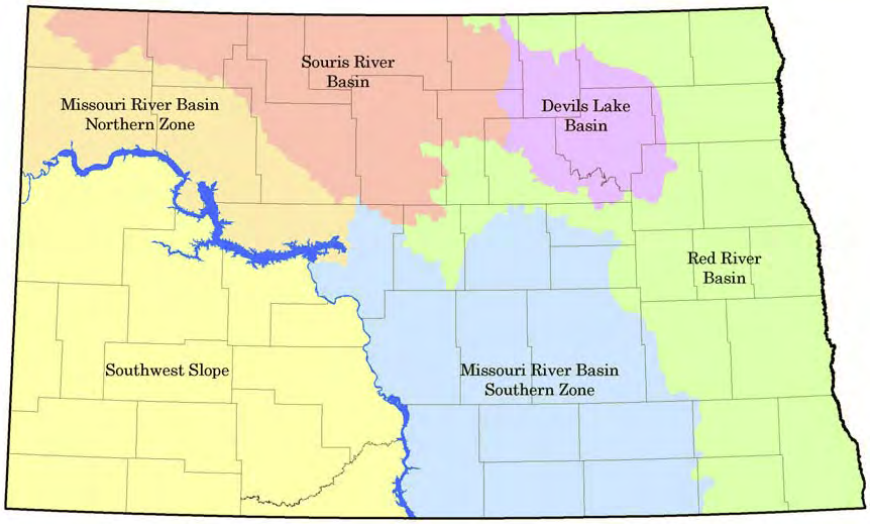
The DU-ND-ILF program may be used to satisfy other federal, state and local regulatory program requirements related to impacts to aquatic resources including enforcement actions. This instrument addresses the required elements for operating an ILF program under the federal 2008 mitigation rule (33 CFR Part 332).

I. Program Service Areas

The DU-ND-ILF program will operate in six (6) service areas listed below.
The service areas are comprised of a combination of 8 digit HUC codes and further defined by the *Wetland Mitigation Banking in North Dakota Interagency Guidance for Mitigation Bank Sponsors*. The service areas include:

- Missouri River Basin Northern Zone
- Missouri River Basin Southern Zone
- Southwest Slope
- Souris River Basin
- Devils Lake Basin
- Red River Basin

And are shown in the map below:



II. ILF Project Development

This section identifies the general framework under which individual ILF projects will be developed and managed.

A. Project Site Selection

Project sites will be selected and developed in accordance with the information detailed in the Compensation Planning Framework (see Appendix I).

DU will work with federal and state agencies and conservation partners to identify project sites suitable for wetland or stream projects. DU will seek feedback from the North Dakota Interagency Review Team (NDIRT) and final authority from the Corps concerning potential restoration sites prior to developing a mitigation plan.[1]

Site selection will take into account:

a) Habitat Improvement: Sites will be evaluated based on their potential to address multiple functions and services, which may include improvement of fish and wildlife habitat, support for rare or endangered species, flood attenuation, water quality improvement and recreation values.

b) Site conditions: DU will evaluate the hydrology, soils, native vegetation and other conditions conducive to aquatic resource development. Projects with greater aquatic resource functional gain per dollar will be given preference.

B. Mitigation Plan

A mitigation plan will be developed for each ILF project and is subject to approval by the Corps for Corps permitted impacts. For non-jurisdictional impacts permitted by the United States Fish and Wildlife Service (USFWS), the mitigation plan will require approval by the appropriate representatives of these agencies. Mitigation plans will be developed and implemented in accordance with 33 CFR 332.4(c)(iii); 332.4(c)(2) through (c)(14) and 332.8 and will include the following required twelve elements:

1. Project objectives
2. Site selection criteria
3. Site protection instruments
4. Baseline information
5. Credit determination methodology
6. Work plan
7. Maintenance plan
8. Performance standards
9. Monitoring requirements
10. Long-term management plan
11. Adaptive management plan
12. Financial Assurances

With each wetland or stream mitigation project, DU will evaluate the appropriate amount of buffer(s) for the project site based on site specific conditions. For example, if a mitigation project site is adjacent to state protected land or a conservation easement, a buffer may not be required.

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[1] NDIRT is mentioned throughout the document. However, the Corps has the final approval authority for the ILF program.

C. Ecological Performance Standards

DU will propose performance standards for each ILF project for NDIRT review and Corps approval. The performance standards will relate to the objectives of the mitigation project and shall be measureable and verifiable. These performance standards will be used to assess whether the project is developing into the desired resource type, providing the expected functions and attaining any other applicable metrics according to the terms detailed in 33 CFR 332.5. Performance standards may be based on variables or measures of functional capacity described in functional assessment methodologies, measurements of hydrology or other aquatic resource characteristics such as diversity of flora and fauna.

D. Project Approval and Instrument Modifications

As In-Lieu Fee project sites are identified and optioned or otherwise secured, DU will submit to the NDIRT mitigation plans that include all applicable items listed in 332.4(c)(2-14). Project approval will be based on factors including site suitability, long-term sustainability, benefits to rare and endangered natural resources, maximum return on expended funds and other factors.

Approved projects will be added as an amendment to the instrument. In general, NDIRT members will provide comments on mitigation project proposals by the end of the 30-day public notice period and these comments will be summarized by the NDIRT chair and given to DU within 15 days from the close of the public notice period. This process is described in Appendix 2 based on the terms described in 33CFR332.8 (d)(g)(j).

E. Project Implementation

DU or its authorized agents will provide the necessary personnel, equipment and materials to implement ILF wetland and stream mitigation projects. Land acquisition and initial physical and biological improvements must be initiated by the third full growing season after the first advanced credit in that service area is sold. If DU fails to meet these deadlines, the District Engineer must either make a determination that more time is needed to plan and implement an ILF project or, if doing so would not be in the public interest, direct DU to disperse funds from the DU-ND-ILF program account to provide alternative compensatory mitigation to fulfill those compensation obligations. In the event only a small number of credits sell in a service area, DU may make a request to the Corps to satisfy mitigation obligations in an adjacent service area subject to the approval of the NDIRT and/or Corps.

F. Monitoring

Monitoring of the mitigation project is necessary to determine if the project is meeting its performance standards and trending toward success as described in 33CFR 332.6. Each project-specific mitigation plan will include a monitoring plan that will describe the performance standards to be monitored, the methods for monitoring, the length of the monitoring period, the dates that the reports must be submitted and the frequency for submitting monitoring reports. DU will be responsible for submitting monitoring reports to the NDIRT based on terms set forth in the mitigation plan.

The content and level of detail on the monitoring reports will be commensurate with the scale and scope of the mitigation project. At a minimum, each report shall contain information as outlined in the Corps Regulatory Guidance Letter 08-03.

III Management

DU shall be responsible for maintaining the ILF projects, consistent with the terms in the approved mitigation plan, until the performance standards and any other requirements the NDIRT and/or Corps may have mandated have been achieved and the Corps has issued a Site Closure Letter.

A. Site Protection

DU shall be responsible for developing and implementing a long-term protection plan for each ILF project in accordance with terms described in 33 CFR 332.7(a). DU will ensure that long-term protection mechanisms are in place prior to project implementation. A copy of the long-term protection mechanism shall be sent to the NDIRT and become part of the official record. An easement endowment will be established to pay for the annual monitoring and any necessary enforcement of the easement. The easement endowment will be held in a designated account.

Long-term protection may be provided through real estate instruments such as wetland and grassland easements held by the USFWS. In addition, if further restrictions beyond the standard USFWS wetland and grassland easements are needed, a 99-year DU easement may be provided. In addition to easements, long-term protection may be provided by other restrictive covenants or the transfer of title to federal or state agencies such as the USFWS or the North Dakota Game and Fish Department.

The real estate instrument, management plan or other mechanism providing long-term protection of the compensatory mitigation site must, to the extent appropriate and practicable, prohibit incompatible uses that might otherwise jeopardize the objectives of the compensatory mitigation project.

B. Sustainability

Each ILF project will be designed, to the maximum extent practical, to require little or no long-term management per the terms described in 33 CFR 332.7(b). This includes minimization of active engineering features and appropriate siting to ensure that natural hydrology and landscape context will support long-term sustainability.

C. Adaptive Management

If the annual monitoring findings indicate that the ILF project is not making expected progress toward meeting the performance standards, DU shall notify the NDIRT as soon as possible as detailed in the terms described in 33 CFR 332.7(c)(1-3). Likewise, if the NDIRT determines that the project is not making expected progress toward meeting the performance standards, the NDIRT shall report, in writing, any findings and recommend corrective measures if needed.

In such instances, the NDIRT in consultation with DU, will determine the appropriate adaptive management steps necessary to meet the performance standards of the ILF project. Measures may include, but are not limited to, site modifications, design changes and invasive plant species and animal control. Performance standards and monitoring

requirements may be revised based on adaptive management measures necessary to address deficiencies and ensure project success. Performance standards may also be revised to reflect changes in management strategies if the new performance standards ensure that ecological benefits are comparable or superior to those detailed in the original mitigation plan. No other revisions to performance standards will be allowed except in the case of natural disasters per the terms detailed in 33 CFR 332.7 (c)(4).

D. Long-term Management

Project specific mitigation plans will include a long-term management plan. The long-term management plan will have a description of any anticipated management needs and projected cost estimates. A portion of the credit sales shall be placed in an escrow account to ensure that funds will be available for the long-term management.

E. ILF Project Closure

After the end of the designated monitoring period, when the performance standards have been met and approved by the NDIRT and all credits have been sold, the NDIRT shall issue a written Site Closure Letter to DU. DU may request that an ILF project be closed early if performance standards have been substantially achieved. The NDIRT shall decide whether to grant such requests.

Once the ILF project is closed, the long-term management period will commence and the designated long-term manager will assume responsibility for the site. If there are remaining funds in the project account associated with the particular ILF project, these funds will be released and will be transferred to the Program Account for the service area and segregated from funds accrued for mitigation. The released remainder funds will be used by DU to implement restoration projects within that respective service area or be used within a different ILF program service area subject to approval by the NDIRT.

IV. Credit Accounting

A. Advanced Credits

Upon approval of the DU-ND-ILF Instrument, DU will be permitted to sell a designated number of advanced wetland and stream credits.

Many regions of North Dakota are in the midst of unprecedented changes to the landscape. Western North Dakota is in the middle of an oil “boom” that has brought unforeseen amounts of people, buildings and infrastructure. Eastern North Dakota, especially the Devils Lake Basin has seen 20 years of wetter climatic conditions and as such, the rise of wetlands and lakes causing a need for road raises and dike building. Due to all of these factors, wetland mitigation needs are on the rise but variable across the state. Because of this variability, advanced credits will be designated in each service area as shown:

- Missouri River Basin Northern Zone 30 credits
- Missouri River Basin Southern Zone 25 credits
- Southwest Slope 20 credits
- Souris River Basin 30 credits
- Devils Lake 50 credits
- Red River Basin 35 credits

DU has requested these advanced wetland credits in each service area to ensure that the ILF program meets potential demand and has sufficient financing for project delivery. If demand for wetland credits exceeds the allotted amount of advanced credits and purchased credits have not been released, DU may request additional advance credits.

Very little information is available regarding the amount of stream mitigation that has been required in the State of North Dakota. However, it can be assumed the western counties with oil activity and eastern cities such as Fargo with flood diversions and dike construction will have the most potential for stream impacts. Much like wetland impacts, stream impacts will vary across the state. In an effort to realize the variability yet maintain sufficient financing for project delivery, advanced credits will be designated in each service area as shown:

- Missouri River Basin Northern Zone 20,000 linear feet
- Missouri River Basin Southern Zone 10,000 linear feet
- Southwest Slope 20,000 linear feet
- Souris River Basin 20,000 linear feet
- Devils Lake 5,000 linear feet
- Red River Basin 20,000 linear feet

Advanced Credits, be it wetland or stream, can be reevaluated by the Corps for an increase or reduction at any time, but will be reviewed at a minimum every 3 years. Reevaluation may include coordination from NDIRT.

B. Determining Credits

The number of credits generated for each ILF project will be based on the size and scope of the ILF project and the amount of functional lift or ecological improvement generated by the project. The amount of wetland credits shall be determined by either using generally accepted ratios per the *Wetland Mitigation Banking in North Dakota Interagency Guidance for Mitigation Bank Sponsors* or by applying procedures from the *A Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing Wetland Functions or Prairie potholes*. The Corps in conjunction with NDIRT and DU will determine the appropriate assessment method and credit ratio for each project. Similarly, the number of stream credits shall be determined through coordination and potential application of stream assessment methodologies or protocols as applicable.

In-kind mitigation will always be the preferred method of mitigation and when provided the generally accepted credit ratios will be applied. In the event that in-kind mitigation is not attainable and out-of-kind mitigation is proposed, a higher ratio will generally be proposed and required. The Corps may determine appropriate ratios on a case by case basis.

C. Cost of Credits

The credit fee will be determined by DU and will be based on full-cost accounting. The credit fee covers project expenses for site identification, travel costs, land acquisition, mitigation plan development, permitting, construction, land protection endowment fee, performance monitoring, contingency measures for adaptive management, long-term management endowment, financial assurances, legal fees, an administrative fee and any other factors as deemed necessary by DU. The credit fee must take into account contingency costs appropriate to the stage of project planning, including uncertainties in

construction and real estate expenses. The credit fees may vary by service area based on unexpected land costs and other factors. DU will evaluate credit fees on an annual basis (by end of calendar year). Fees may be adjusted as deemed necessary to reflect the full-cost accounting of operating an ILF program.

DU will receive an administrative fee of 15% per credit. The administrative fee will be deducted when payment is received and deposited into the DU program account. The administrative fee offsets expenses associated with program administration, which includes managing credit sales transactions, annual reporting, accounting, marketing, education and training and other activities not related to project implementation.

D. Credit Release Schedule (Not Applicable to Advanced Credits)

Release of credits must be tied to performance-based milestones (permitting, site protection, construction, planting and/or establishment of plant and animal communities). When determining the credit release schedule, factors to be considered may include, but are not limited to, the type of ILF project (e.g., restoration, enhancement, establishment, etc.), the likelihood of success, the complexity of the project and the aquatic resource type(s) and function(s) to be provided by the ILF project. The terms of the credit release schedule will be proposed in each mitigation plan. The NDIRT will determine the credit release schedule, including the percentage of credits released after full achievement of performance standards. A general framework for credit release related to restoration, enhancement and establishment projects is detailed in the following schedule:

- 15% - Instrument approval, mitigation plan approved, recording of the site protection instrument and financial assurances established
- 15% - Completion of initial physical and biological improvements
- 10% - Year 1 Success Criteria
- 15% - Year 2 Success Criteria
- 20% - Year 3 Success Criteria
- 10% - Year 4 Success Criteria
- 15% - Year 5 Success Criteria

Success criteria percentages as shown above in years 1-5 are estimates based on realistic success of restored wetland basins. Monitoring results for each year will dictate the available credits for release. This schedule does not apply to restoration of a forested wetland in which case a project-specific release schedule will be required.

If the ILF project does not meet designated milestones or achieve the performance-standards detailed in the mitigation plan, the NDIRT may modify the credit release schedule or reduce the number of credits eligible for release.

E. Credit Release Approval

Mitigation obligations assumed by the sale of advanced credits will be fulfilled by the implementation of one or more projects within the service area. Advanced credits will be released at particular sites in accordance with a performance based schedule to be included in the mitigation plan approved by the NDIRT for each site. Credit release requests by DU will be reviewed by the NDIRT.

As advance credits are fulfilled at a mitigation site, an equivalent number of advance credits may be made available for sale at the discretion of the NDIRT. Credit generated in excess of advance credit obligations may be sold as released credits based upon the credit release schedule in the mitigation plan.

F. Use of Credits

All activities authorized by Department of the Army permits (Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act), activities authorized by the USFWS and other activities including enforcement actions may be eligible to use the DU-ND-ILF as compensatory mitigation. Credits may be sold to fulfill USFWS requirements even if no Corps authorization is required, however, a Credit Transaction Notification must be submitted to the Corps if the credits are part of a Corps approved mitigation site under its regulatory Program. The NDIRT will determine the number of credits (wetland or stream) required to compensate for the authorized impacts.

Upon NDIRT approval of purchase of credits from the DU-ND-ILF, the permittee may contact DU to purchase the necessary credits. The responsibility to provide compensatory mitigation remains with the permittee until payment is received by DU. DU assumes the legal responsibility for compensation requirements once the permittee purchases credits and transfers payment to DU. Credit sales are subject to availability. Credits can only be sold one time. All sold credits of any kind must be deducted from the site in the credit balance ledger. DU reserves the right not to sell credits for any reason. Credits sold will be prioritized according to date purchased. However, Corps authorized impacts will be given top priority over all other impacts under the DU-ND-ILF program. For instance, should multiple credits be sold on the same date to cover Corps and non-Corps impacts, the Corps impacts will be assigned the first credits from the ILF project.

G. Credit Transaction Notification

Each Corps authorization that includes a special condition requiring purchase credits from the DU-ND-ILF will include a requirement that DU certify the transfer or responsibility via written communication to the permittee and the Corps.

As sponsor, DU must submit a Credit Sale letter to the Corps once payment is received. The Credit Sale letter must be signed and dated by DU. The Credit Sale letter must include the permit number(s) for which DU is accepting fees and the number of credits being purchased. DU must submit the signed and dated Credit Sale letter electronically to the Corps within 30 days of receiving payment from the permittee. A copy of each Credit sale letter will be retained by DU as part of the administrative and accounting records. The same process will be followed if the wetland impact is not under Corps jurisdiction and is permitted by the USFWS.

V. In-Lieu Fee Program Account and Reporting

Upon corps approval of the DU-ND-ILF program, DU will establish an ILF Program Account. The Program Account will be held at a financial institution that is a member of the Federal Deposit insurance Corporation. Interest that accrues from the program account will be applied towards the management of the ILF program. Disbursements from the Program Account may only be made upon receipt of written authorization from

the NDIRT. Funds for the operation of the ILF program and project development may be obtained from other sources and repaid as credits are sold.

As part of the overall Program Account, funds for each service area will be tracked separately. Funds tracked will include deposits from the sale of credits and expenses associated with implementing ILF projects in accordance with 33 CFR 328.8(i) (3). In service areas where DU has met all the mitigation obligations associated with specific credit sales, then DU may use any remaining funds to establish mitigation projects within the same or in a different ILF service area in advance of a credit sale or remaining funds may be used for conservation projects within the same or different service area subject to approval by the Corps districts and the IRT.

DU will maintain a system for tracking the production of credits, credit transactions and financial transactions by service area and separated for each project within the respective service area. DU will submit an Annual Program Report to the NDIRT no later that March 31st of each year and will include program data for the previous calendar year (January 1-December 31). The Annual report will include the following documents: summary sheet, income statements, expense statement, credit report summary and the detailed credit report.

VI Modifications of Instrument

This instrument may not be modified except by written agreement between DU and the Corps. Instrument modifications, including the addition of ILF projects will generally follow the process outlined in Appendix II as detailed in 33 CFR 332.8(g) (1). The NDIRT may use a streamlined modification review process for changes reflecting adaptive management of the ILF program, credit releases, changes in credit releases and credit release schedules and changes that the NDIRT determines are not significant according to terms detailed in 33 CFR 332.8(g) (2).

VII Other Provisions

Provision of Legal Responsibility

The legal responsibility of providing compensatory mitigation lies with the permittee until the permittee purchases credits from the DU-ND-ILF program. The transfer of liability from the permittee to DU is established by the submission of a credit sale letter signed by DU and the transfer of fees from the permittee to DU. DU will assume the responsibility for all aspects of mitigation until the Site Closure Letter is issued. Upon the issuance of the Site Closure letter, DU may transfer long-term management to a designated entity if such transfer is approved by the NDIRT.

Instrument Closure Provisions

Closure procedures for either the entire ILF Instrument or a specific service area may proceed within thirty (30) days upon written notification by either the NDIRT or Ducks Unlimited. In the event that either the ILF instrument or specific service area is closed, DU is responsible for fulfilling any remaining obligations for credits sold prior to closure unless the obligation is specifically transferred to another entity as agreed to by the NDIRT and DU. DU shall be reimbursed from the ILF program account for all costs incurred in fulfilling the remaining obligations. The Corps may direct DU to use these

funds to purchase credits from another source of third-party mitigation or disburse funds to a government or non-profit natural resource management entity willing to undertake further compensation activities. The Corps itself cannot accept directly, retain or draw upon those funds in the event of a default.

Any funds remaining in the program account after the mitigation obligations are satisfied must be used for the restoration and/or preservation of aquatic resources and associated upland buffers within the service area in which the funds reside unless otherwise approved by the NDIRT.

Force Majeure

DU or a grantee will not be responsible for an ILF project failure that is attributed to natural catastrophes such as flood, fire, drought or regional pest infestation the NDIRT determines is beyond the reasonable control of DU to prevent damage or mitigate. DU shall bear the burden of demonstrating that the Force Majeure was caused by circumstances beyond the control of DU and the damage is irreparable by any practical and reasonable means. The NDIRT has sole reasonable discretion to determine whether an event is Force Majeure.

Dispute Resolution

Resolution of disputes between IRT members and the District Engineer shall be resolved in accordance with the terms detailed in 33 CFR 332.8(e). Resolution of disputes related to overall program management or as it pertains to individual ILF projects, e.g. satisfaction of performance standards will be resolved between DU and the District Engineer in consultation with the NDIRT.

Validity of the Instrument

This instrument will become active on the latter date of the signature of DU and the US Army Corps of Engineers, District Engineer (DE), or the DE's delegated authority. This instrument may only be amended or modified with the written approval of DU and the District Engineer.

Notice

Any notice required or permitted hereunder shall be deemed to have been given either (i) when delivered by hand, or (ii) three (3) working days following the date deposited in the United States mail, postage prepaid, by registered or certified mail, return receipt requested, or (iii) sent by federal Express or similar next day nationwide delivery system, addressed as follows (or addressed in such other manner as the party being notified shall have requested by written notice to the other party):

District Engineer
U.S. Army Corps of Engineers
North Dakota Regulatory Office
1513 South 12th Street
Bismarck, ND 58504

Ducks Unlimited, Inc.
Chief Counsel
1 Waterfowl Way
Memphis, TN 38120-2351

cc: Ducks Unlimited, Inc.
Great Plains Regional Office
2525 River Road
Bismarck, ND 58503

Invalid Provisions

In the event that one or more of the provisions contained in this instrument were developed inadvertently or with malicious intent and found to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions hereof and this Instrument shall not be construed as invalid, illegal or unenforceable.

Heading and Captions

Any paragraph heading or captions contained in the instrument shall be for the convenience of reference only and shall not affect the construction or interpretation of any provisions of this instrument.

Binding

This instrument shall be immediately binding upon DU and its successors, assignees and legal representatives upon signing by DU and the Corps.

Liability of Regulatory Agencies

The Corps and signing NDIRT members that administer the ILF programs to protect wetlands and waterways and serve the public's interest will not guarantee the availability of credits to any entity or ensure the financial success of the ILF program bank, specific individuals or entities. The public should not construe this instrument as a guarantee in any way that the NDIRT will approve sale of credits from the ILF program, or that the regulatory agencies will forgo other mitigation options that may also serve the public interest.

Right to Refuse Service

Corps approval of purchase or transfer of credits from the DU-ND-ILF program does not signify DU's acceptance or confirmation of DU's offer to sell or transfer credits. DU reserves the right to refuse to sell or transfer credits from the DU-ND-ILF program for any reason.

VIII. Signatures:

This agreement, entered into by Ducks Unlimited; United States Fish and Wildlife Service; United States Environmental Protection Agency; Natural Resources Conservation Service; Federal Highway Administration; North Dakota Game and Fish Department; and the United States Army Corps of Engineers is for the purpose of establishing the Ducks Unlimited North Dakota In–Lieu Fee Program (DU-ND-ILF). The DU-ND-ILF will be used to mitigate for unavoidable wetland and stream impacts approved through the Corps, who is responsible for administering Section 404 of the Clean Water Act.

The objective of the DU-ND-ILF is to compensate for unavoidable impacts throughout the State of North Dakota. The goal is to compensate for impacts with mitigation of similar types and functions.

The DU-ND-ILF will encompass all of North Dakota and the six service areas as defined in the Compensation Planning Framework, Appendix 1 to this agreement. At the discretion of the Corps, credits may be approved outside of the primary geographic service area.

_____ Date Signed:_____
Ducks Unlimited, Inc.

_____ Date Signed:_____
Kathryn M. Schenk, Chief, Operations Division
US Army Corps of Engineers, Omaha District

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United States Fish and Wildlife Service

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United States Environmental Protection Agency

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Natural Resources Conservation Service

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Federal Highway Administration

This agreement, entered into by Ducks Unlimited; United States Fish and Wildlife Service; United States Environmental Protection Agency; Natural Resources Conservation Service; Federal Highway Administration; North Dakota Game and Fish Department; and the United States Army Corps of Engineers is for the purpose of establishing the Ducks Unlimited North Dakota In–Lieu Fee Program (DU-ND-ILF). The DU-ND-ILF will be used to mitigate for unavoidable wetland and stream impacts approved through the Corps, who is responsible for administering Section 404 of the Clean Water Act.

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_____ Date Signed:_____

North Dakota Game and Fish Department

Appendices

Appendix I: Compensation Planning Framework

The compensation planning framework adopts a landscape-watershed approach to selecting and implementing ILF projects that restore, enhance, establish or preserve aquatic resources under the DU-ND-ILF program. This framework will be used to identify, evaluate and screen potential ILF projects. The compensation planning framework includes the following required 10 elements:

I. Description of geographic service areas.
II. Description of threats to aquatic resources and how the ILF program will help offset impacts resulting from those threats.
III. An analysis of historic aquatic resource loss in the service area.
IV. Analysis of current aquatic resource conditions in the service areas.
V. A statement of aquatic resource goals and objectives for each service area.
VI. A prioritization strategy for selecting and implementing compensatory mitigation projects.
VII. An explanation of how any preservation strategies may satisfy the criteria for the use of preservation.
VIII. A description of stakeholder involvement in plan development and program implementation.
IX. A description of the long-term protection and management strategies for activities conducted by the ILF program sponsor.
X. A strategy for periodic evaluation and reporting on the progress of the program.

The mission of Ducks Unlimited is to conserve, restore and manage wetlands and associated habitats that benefit wildlife and people. To achieve that mission, DU uses an ecosystem approach for conservation planning which is defined in our International Conservation Plan (ICP, www.ducks.org).

An ecosystem approach to conservation planning and delivery is consistent with the watershed approach that will be utilized to identifying and implementing ILF projects. A watershed approach allows for a step-down approach to conservation delivery in which the largest planning units are defined conceptually by watershed boundaries, whereas actual ILF projects will occur within specific service areas consistent with the compensation planning framework.

ILF projects that support restoration of a range of wetland types will contribute to the long-term conservation and management of critical habitats and associated wildlife species within the basin.

ELEMENT I: GEOGRAPHIC SERVICE AREAS

The DU-ND-ILF program will operate in the six (6) service areas listed below. These service areas are comprised of a combination of 8 digit HUC codes and further defined by the *Wetland Mitigation Banking in North Dakota Interagency Guidance for Mitigation Bank Sponsors*.

Missouri River Basin Northern Zone

Watershed	Hydrologic Unit Code (HUC)
Charlie-Little Muddy Creek	10060005
Big Muddy	10060006
Brush Lake Closed Basin	10060007
Lake Sakakawea	10110101
Little Muddy	10110102

Missouri River Basin Southern Zone

Watershed	Hydrologic Unit Code (HUC)
Painted Woods-Square Butte	10130101
Upper Lake Oahe	10130102
Apple Creek/Long Lake	10130103
Beaver Creek (Lake Oahe)	10130104
West Missouri Coteau	10130106
James River Headwaters	10160001
Pipestem River	10160002
Upper James River	10160003
Elm-Maple River	10160004

Southwest Slope

Watershed	Hydrologic Unit Code (HUC)
Lower Yellowstone River	10100004
Lake Sakakawea	10110101
Upper Little Missouri River	10110201
Boxelder Creek	10110202
Middle Little Missouri River	10110203
Beaver Creek (Little Missouri)	10110204
Lower Little Missouri River	10110205
Painted Woods-Square Butte	10130101
Upper Lake Oahe	10130102
Knife River	10130201
Upper Heart River	10130202
Lower Heart River	10130203
Upper Cannonball River	10130204
Cedar Creek	10130205
Lower Cannonball River	10130206
North Fork Grand River	10130301
Grand River	10130303

Souris River Basin

Watershed	Hydrologic Unit Code (HUC)
Upper Souris River	09010001
Des Lacs River	09010002
Lower Souris River	09010003
Willow Creek	09010004
Deep River	09010005

Devils Lake Basin

Watershed	Hydrologic Unit Code (HUC)
Devils Lake	09020201

Red River Basin

Watershed	Hydrologic Unit Code (HUC)
Bois De Sioux	09020101
Upper Red River	09020104
Western Wild Rice River	09020105
Elm-Marsh River	09020107
Goose River	09020109
Upper Sheyenne River	09020202
Middle Sheyenne River	09020203
Lower Sheyenne River	09020204
Maple River	09020205
Sandhill-Wilson River	09020301
Grand Marias-Red River	09020306
Turtle River	09020307
Forest River	09020308
Park River	09020310
Lower Red River	09020311
Pembina River	09020313

DU will mitigate for aquatic resource loss within the service areas by completing projects in the same watershed where the impact occurred whenever possible. The type of impacts and watershed priorities will guide ILF project selection, plan development and implementation.

ELEMENTS II, III, IV and V: INCLUDES DESCRIPTION OF THREATS TO AQUATIC RESOURCES, HISTORICAL AND CURRENT RESOURCES LOST IN EACH SERVICE AREA AND STATEMENT OF GOALS AND OBJECTIVES.

As the ILF sponsor, DU will take into account the goals and objectives of watershed management plans and other conservation priority plans in identifying and implementing projects. This section provides a description of watershed characteristics, threats and impacts and conservation planning by service area.

Wetland and Grassland Loss

According to the United States Geological Survey (USGS) North Dakota once had approximately 4.9 million acres of wetlands but by the 1980s that number had been reduced to about 2.7 million acres. This equates to a 45% loss in wetlands from pre-settlement times. Most of this loss can be attributed to wetland drainage for agricultural development (USGS, 2013).

In 1985, the Swampbuster provision of the Farm Bill helped slow the amount of wetland drainage in North Dakota. Although slowed, wetland drainage did not stop and recently has seen resurgence. This upswing in drainage can be attributed to a number of reasons including genetically resistant crops allowing for a northwest shift in the corn belt, ethanol production increasing the demand for corn, the tripling of price for corn and

soybeans between 2002 and 2012 and a subsidized crop insurance program that protects farmers from loss when planting areas too wet to harvest (Johnston 2012) In addition to wetland drainage, grassland conversion to crop production has also seen a rise in the last decade. A recent study showed grassland conversion between 2006 and 2011 was mostly concentrated in North Dakota and South Dakota, east of the Missouri River (Wright and Wimberly 2013). Currently over two-thirds of the original 90 million acres of native grassland in the Prairie Pothole Region have been converted to other land uses. In addition to native grassland loss, grasslands associated with the Conservation Reserve Program (CRP) are also diminishing from the CRP high in 2007 of 8.3 million acres to less than 6 million acres in 2013. Driving factors for grassland conversion are similar to the factors for wetland drainage. As commodity prices sustain higher numbers, these trends in wetland and grassland conversion should continue.

Energy Expansion

North Dakota is in the midst of an unprecedented oil "boom" that started approximately 5 years ago. Although always an oil producing state and having previous "booms" in the region, the last ending in the early 1980s, the advent of horizontal drilling and hydraulic fracturing has tapped a much larger oil reserve making this one of the largest in the country. As of July 22, 2013 there were 186 active oil rigs in North Dakota (State of North Dakota, 2013). In addition, according to Tessa Sandstrom, the communications manager for the North Dakota Petroleum Council, oil production has increased from 35.7 million barrels of oil in 2005 to 237 million barrels of oil in 2012. She further noted the 8,500 wells as of February 2013 are producing 779,000 barrels of oil per day making North Dakota the No. 2 producer of oil in the nation (Ogden, 2013).

In 2013 the United States Geological Survey estimated the amount of recoverable oil in the Bakken and Three Forks Formation at 7.4 billion barrels. These estimates show how variable and dynamic the oil industry is in that the USGS 2008 estimate showed only 3.65 billion barrels of oil (USGS, 2013). As predictions of recoverable oil seem to climb so does the confidence that this oil "boom" will last into the foreseeable future.

In addition to oil production in western North Dakota, the last 10 years have seen an increase in wind power throughout the entire state. With a good supply of wind and a rural landscape, North Dakota has several benefits when it comes to wind production. In fact, North Dakota has more wind available than any other state (State of North Dakota Dept. of Commerce, n.d.). Currently, there are 991 wind turbines in service that could produce approximately 5.9 million megawatt-hours of electricity or enough to power about 390,000 homes. In addition, five companies have submitted Letters of Intent to build wind farms that would add approximately 686 megawatts of power, which would be a 41% increase of the wind energy capacity (Lee, 2013).

Wind farms impact to the landscape involves increased noise pollution and the construction of access roads to each tower. In addition to the visual impacts, the blades on the turbine have the potential to impact flying birds, bats, etc.

Population Increase

North Dakota is in the midst of unprecedented population growth. North Dakota has seen an estimated 4% population increase since 2010 to a population of 699,628 in 2012 (US Census Bureau, 2013). These estimates may actually be low as the housing shortage in western North Dakota has left thousands of people living in temporary facilities such as mancamps, campers and personal vehicles. With the increased

estimates in oil reserves and the seemingly never-ending migration of people to the region, an increase of total population up to 1 million people could be attained. For example, there were 27 new housing units built in 2003 while in 2012 that number jumped to 1816 and half-way into 2013, there are 922 (City of Williston, 2013). In addition, through October of 2012, Williston set a new record for building permits with 938 permits worth $406 million (Associated Press, 2012). With the increasing population in such a short, demanding timeframe, existing infrastructure is overwhelmed and outdated. Although houses are being built and roads widened, other facilities such as landfills, water treatment and wastewater sewer systems are undersized for the population increase.

Highway Expansion

The population increase and the heavy truck traffic associated with oil recovery have stressed the current road system in western North Dakota to the breaking point. As such, road improvements have become a top priority for the state. From 2008-2011, $635 million was spent on infrastructure in western North Dakota. In 2012 alone, that number was $305 million. Projects included adding passing and turning lanes on US Highway 85 between Williston and Watford City, major construction and widening on highways 8, 22, 23 and 85 and a new truck route around the city of Williston (North Dakota Department of Transportation, n.d.). Although impressive, the need is far greater and future improvements are currently being designed by the Department of Transportation. In fact, the final Statewide Transportation Improvement Program for 2013-2016 shows budgeted expenditures for 2013 at $1.2 billion and for 2014 at $1.1 billion (North Dakota Department of Transportation, 2013). By comparison, Montana has expenditures of $499 million for 2013 and $440 million for 2014 (State of Montana Department of Transportation, 2013). These types of expenditures show the overwhelming need for roadway improvements in the state.

Flooding

The climate of North Dakota is best described as drastic. Temperatures can fluctuate from summer highs in the 100s to winter lows down to -60^0 F. Precipitation is also dynamic. Although considered a dry state and prone to drought, North Dakota also can be very wet. While the 1980's were considered dry, many consider the early 1990s to be the turning point from dry to excessively wet. This wet cycle, although not consistent, has continued to present time. With the increase in precipitation, numerous flood events have occurred in the state. The most drastic occurred in Grand Forks in 1997, Minot and Bismarck in 2011 and several flood events in Fargo. These events not only impacted these larger cities but many smaller communities as well. Along with river flooding, North Dakota is home to numerous closed basins. These closed basins have outflow elevations much higher than the normal water elevation in the basin. As such, infrastructure has been developed within the basin at a lower elevation than the outlet. Under normal conditions, there are no impacts to the infrastructure but under wet conditions, the water elevation in the basin increases and infrastructure becomes inundated. The most famous of these basins is Devils Lake. In 1993, the elevation of Devils Lake was 1422.62 feet and covered a surface area of 44,230 acres. By 2011, the elevation had increased to 1454.3 feet and covered an area of 211,300 acres for an increase of 167,070 acres or 261 square miles (North Dakota State Water Commission, 2013). This increase in water elevation has flooded thousands of acres of farmland, roads and homes. Although Devils Lake is the largest closed basin, numerous other smaller closed basins dot the landscape. Roads cross through many of these closed

basins and have become inundated with water. Numerous road closures have resulted and on the more important thoroughfares, emergency road raises have commenced. Many of these have been undertaken in cooperation by the various counties and the Federal Emergency Management Agency (FEMA). According to FEMA, between 1964 and 2010, North Dakota led the 6 state region in disaster declarations and is among the top in the country in the last 15 years (Associated Press, 2013). Specifically, North Dakota had disaster declarations for flooding every year since 1993 except years 2003, 2008 and 2012. In addition, FEMA spent more than $185 million on the 2011 Souris Valley flood alone (Federal Emergency Management Agency, n.d.).

With seemingly devastating floods occurring more frequently, the state and affected communities are developing flood impact plans to help reduce the effects of future flooding. The Web site *Mouse River Flood Protection Plan* (http://www.mouseriverplan.com/project-overview/) includes an entire assessment of enhancements needed to protect Minot from future flooding similar to 2011. Plans include purchasing property in flood prone areas to limit future damage. In Fargo, after four major flood events in the last five years, a flood diversion project is being developed. Due to the size and overall cost, the state is pressuring the federal government to support the diversion project and the North Dakota legislature has appropriated $175 million. In addition, the state has committed to providing up to $450 million more toward the project (North Dakota Office of the Governor, 2013).

Service Area 1 – Missouri River Basin Northern Zone

Service Area Characteristics

The Missouri River Basin Northern Zone is located in Northwest North Dakota. The southern boundary of the service area is the Missouri River from the Montana border to the dam at Riverdale, ND. The western boundary is the Montana border from the Missouri River extending north to the Canadian border. The northern boundary includes a small portion of the Canadian border before following the continental divide southeast to the southeast corner of Ward County. In addition to Ward County, the service area includes all or portions of Williams, Divide, Burke, Mountrail and McLean counties. Included in the service area is a portion of the Fort Berthold Reservation.

The area is further described as the Northwestern Glaciated Plains ecoregion and delineates the western most boundary of glaciation in the state. The area includes the Missouri Coteau region of rolling hills with high concentrations of wetlands. The Missouri Coteau tends to be higher in elevation with more native prairie and intact wetlands. As the area transitions from the Missouri Coteau to the Missouri Coteau Slope, the elevation decreases, the slope flattens, wetland concentrations diminish and agriculture dominates the landscape. Finally, adjacent to the river, the River Breaks transition from the upland plains through highly eroded wooded draws and riparian areas to the river bed of the Missouri River and Lake Sakakawea (US Geological Survey [USGS], 1998)

Due to its northwestern location in the state with colder temperatures and drier conditions, wetland drainage is not as prevalent as seen in the eastern half of the state. While some drainage does exist, wetlands tend to be farmed to the wetland edge or farmed through if dry.

Threats and Impacts

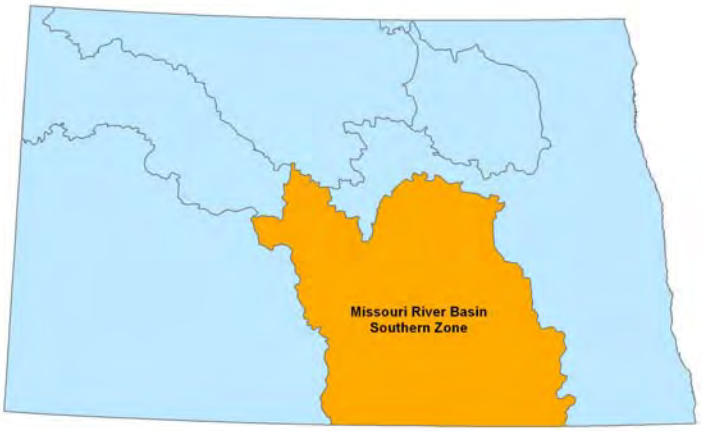
Due to the rural setting and low population of the area, agriculture and the energy industry dominate the landscape. As such, threats and impacts include habitat loss and fragmentation related from agricultural practices and oil development. Virtually the entire service area is impacted by the current oil “boom”. This oil “boom” has caused an influx of population in the area requiring cities and rural areas to play “catch-up” with infrastructure from roads to water and sewer treatments. In addition, the use of millions of gallons of water in hydraulic fracturing has potential to impact water quality and availability.

Along with possible wetland impacts, activities associated with the oil “boom” include building of new roads, housing and other infrastructure. Much of this is adjacent to the Missouri River and its tributaries. With the new infrastructure, come new culverts, riprap, and riparian destruction in an effort to build safe efficient roadways, etc. Stream impacts in a region such as the Missouri River Northern Zone have the possibility of being the major impacts in the service area.

Conservation Planning

Conservation planning centers around the management of our soil, water, plant and animal resources. Working with the agricultural community on the conservation practices to minimize soil erosion and water quality issues from fertilizer to animal waste. In addition, working with the oil industry to minimize the effects of the population increase on the infrastructure and surrounding landscape.

Service Area 2 – Missouri River Basin Southern Zone



Service Area Characteristics

The Missouri River Basin Southern Zone is located in south central North Dakota. The west boundary of the service area is the Missouri River from the dam at Riverdale, ND to the South Dakota border. The southern boundary is the South Dakota border from the Missouri River to western Sargent County. The northern and eastern boundary of the service area is adjacent to the Red River Basin Service Area. The service area includes all or portions of McLean, Sheridan, Wells, Eddy, Foster, Burleigh, Kidder, Stutsman, Barnes, Emmons, Logan, Lamoure, Ransom, McIntosh, Dickey and Sargent counties.

Much like the Missouri River Northern Zone, the western portion of the southern zone is described as the Northwestern Glaciated Plains ecoregion. The area includes the Missouri Coteau region of rolling hills and high concentrations of wetlands. The Missouri Coteau tends to be higher in elevation with more native prairie and intact wetlands. As the area transitions from the Missouri Coteau to the Missouri Coteau Slope, the elevation decreases, the slope flattens, wetland concentrations diminish and agriculture dominates the landscape. Finally, adjacent to the river, the River Breaks transition from the upland plains down through highly eroded wooded draws and riparian areas to the river bed of the Missouri River and Lake Oahe. East of the Missouri Coteau lies the Drift Plains region surrounding the James River. With a fairly flat topography and highly productive soils agriculture dominates the landscape. Wetlands are numerous but tend to be shallower and are easily drained and farmed (USGS, 1998)

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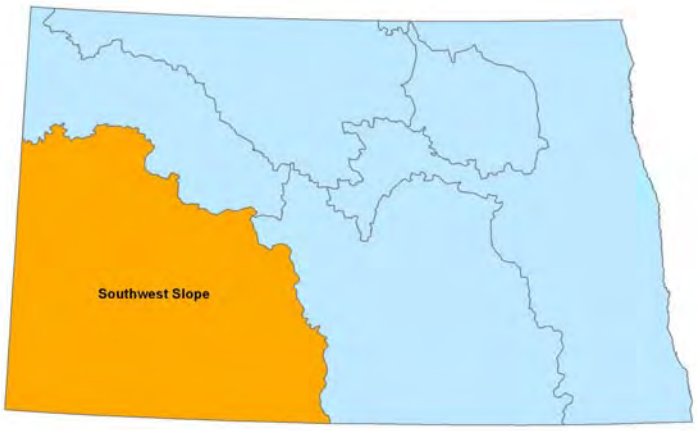
Threats and Impacts

Due to the rural setting and low population of the area, agriculture and the energy industry dominate the landscape. As such threats and impacts include habitat loss and fragmentation related from agricultural practices, coal mining and electrical generation including wind farms. As much of the Missouri River Southern Zone lies within the Prairie Pothole Region of North Dakota, wetland drainage, CRP loss and grassland conversion are the primary threats. As commodity prices sustain historically high levels, these conversions will maintain if not increase. These threats should be more prominent in the east half of the zone with greater wetland numbers and more chance for conversion.

Although stream impacts are undoubtedly possible in the Missouri River Southern Zone an increase in impacts is not as likely as in the Missouri River Northern Zone with all the new activity. Impacts are most likely to be concentrated around areas such as the City of Bismarck where an increase in the city population has increased housing construction. These areas of rapid construction tend to have an increase in impacts and mitigation need.

Conservation Planning
Conservation planning centers around the management of our soil, water, plant and animal resources. Working with the agricultural community on the conservation practices to minimize soil erosion and water quality issues from fertilizer to animal waste. Planning should also include continued authorization of CRP and conservation compliance in the Farm Bill. In addition, reclamation of mining sites and treatment of power plant waste water.

Service Area 3 – Southwest Slope



Service Area Characteristics
The Southwest Slope is located in southwest North Dakota. It includes all area south and west of the Missouri River to the Montana and South Dakota state lines. The service area includes the counties of McKenzie, Golden Valley, Billings, Dunn, Mercer, Oliver, Stark, Morton, Slope, Hettinger, Grant, Bowman and Adams. In addition, the service area includes portions of the Standing Rock Reservation and the Fort Berthold Reservation.

A majority of the Southwest Slope is considered Missouri Plateau which was essentially a non-glaciated region that retains much of its historical characteristics. Soils and lack of moisture tend to make the area less productive as compared to the eastern part of the state so agriculture is not as dominant. Grasses tend to be short grass prairie and wetlands are less substantial as compared to the rest of the state. Further to the west the Missouri Plateau gives way to the Little Missouri Badlands region. This region of clay buttes are continually eroding and washing away by the Little Missouri River. Much of this region is in government ownership and grazing is the dominant use along with recreational opportunities (USGS, 1998).

Threats and Impacts

Due to the rural setting and low population of the area, agriculture and the energy industry dominate the landscape. As such threats and impacts include habitat loss and fragmentation related from agricultural practices and oil development. The current oil "boom" has caused an influx of population in the area requiring rural areas to play "catch-up" with infrastructure from roads to water and sewer treatments. In addition the use of millions of gallons water in hydraulic fracturing has potential to impact water quality and availability.

Although agriculture is still found in the Southwest Slope, ranching is still dominant on the landscape and as such, large tracts of grassland are still found. The area also was not glaciated during the last ice age and therefore is not part of the Prairie Pothole Region. With the lack of potholes from retreating glaciers and drier conditions, the Southwest Slope has a limited amount of wetlands already on the landscape. In addition, with row crop production not as substantial as east of the Missouri River, wetland drainage is not as prevalent.

Much like the Missouri River Northern Zone, the Southwest Slope has seen an increase in construction activities associated with the oil "boom" including new roads, housing and other infrastructure. Much of this is adjacent to the Missouri River, the Little Missouri River and their tributaries. As oil production continues to increase and expand into the service area, stream impacts have the possibility of being the major impact in the service area.

Conservation Planning

Conservation planning centers around the management of soil, water, plant and animal resources. Working with the agricultural community on conservation practices to minimize soil erosion and water quality issues from fertilizer to animal waste. Also, minimizing oil related impacts to communities and the surrounding landscape. Reclamation of oil & mining sites and treatment of power plant waste water.

Service Area 4 – Souris River Basin

Service Area Characteristics

The Souris River Basin is located in north central North Dakota and is bordered on the north by Canada, the southwest by the continental divide and by the Devils Lake basin on the east. The Souris River, otherwise known as the Mouse River enters North Dakota from Canada in Renville County, flows south through Minot to Velva, ND before turning back to the north and flowing into Canada from Bottineau County. Water from the Souris River eventually drains into Hudson Bay. The service area includes all or portions of the counties of Divide, Burke, Renville, Bottineau, Rolette, Ward, McHenry, Pierce, Benson, McLean and Sheridan. In addition, the Turtle Mountain Reservation is found within the service area.

The Souris River Basin lies within the Northern Glaciated Plains ecoregion. This prairie landscape is a combination of drier less productive farm land in the west and wetter, better organic soils in the east. The landscape tends to be gently rolling hills with numerous wetlands. In addition, within the service area, the Turtle Mountains are covered by trees and deeper lakes with minimal agriculture (USGS, 1998).

Threats and Impacts

Due to the rural setting and low population of the area, agriculture and the energy industry dominate the landscape. As such threats and impacts include habitat loss and fragmentation related from agricultural practices and oil development. The service area has seen numerous effects of the current oil “boom” especially in the western portion. Effects include an influx of population requiring cities and rural areas to play “catch-up” with infrastructure from roads to water and sewer treatments. In addition, the use of millions of gallons water in hydraulic fracturing has potential to impact water quality and availability.

The Souris River Basin lies within the Prairie Pothole Region of North Dakota. As such, wetland drainage, CRP loss and grassland conversion are the primary threats. As commodity prices sustain historically high levels, these conversions will maintain if not increase.

The Souris River Basin, much like the Missouri River Basin Northern Zone to the west, has seen an increase in construction activities associated with the oil “boom” including new roads, housing and other infrastructure. In addition to increase oil production and associated activities in the rural areas of the service area, urban areas such as Minot are being deluged with construction activities associated with the housing shortage in the area. As such, the Souris River and its tributaries are under threat of stream impacts related to these construction and oil activities.

In addition to these impacts, the Souris River was the scene of a devastating flood in 2011. Recovery from the flood is still underway and a future flood reduction plan is being investigated.

Conservation Planning

Conservation planning centers around the management of soil, water, plant and animal resources. Working with the agricultural community on conservation practices to minimize soil erosion and water quality issues from fertilizer to animal waste. In addition, reclamation of oil well sites and treatment of oil related waste water. As wetlands and

grasslands in the Prairie Pothole Region continue to be converted, planning should concentrate around wetland grassland restoration and protection.

Service Area 5 – Devils Lake Basin

Service Area Characteristics

The Devils Lake Basin is located in northeast North Dakota and is bordered on the west by the Souris River Basin and all other sides by the Red River Basin. Devils Lake is a terminal basin which at its current elevation has no outlet. The Devils Lake basin is dominated by agriculture and a high density of wetland basins. The service area includes all or portions of the counties of Rolette, Towner, Cavalier, Pierce, Benson, Ramsey, Walsh, Nelson and Eddy counties. In addition, the Spirit Lake Reservation is included within the basin.

Threats and Impacts

Found in the northeast section of North Dakota, agriculture has dominated the Devils Lake Basin and is one of the most drained and impaired regions of the state. Large portions of the Devils Lake Basin have been drained completely with drainage ditches from the upper reaches of the watershed draining downstream and terminating into Devils Lake. As a closed basin with a high natural outlet, Devils Lake has been filling and expanding as previously stated. There is still debate as to the impact of wetland drainage on the lake level but upstream water storage has been decreased by the numerous drains. Also, these open ditches increase sediment transport, turbidity, fertilizer and chemical transport.

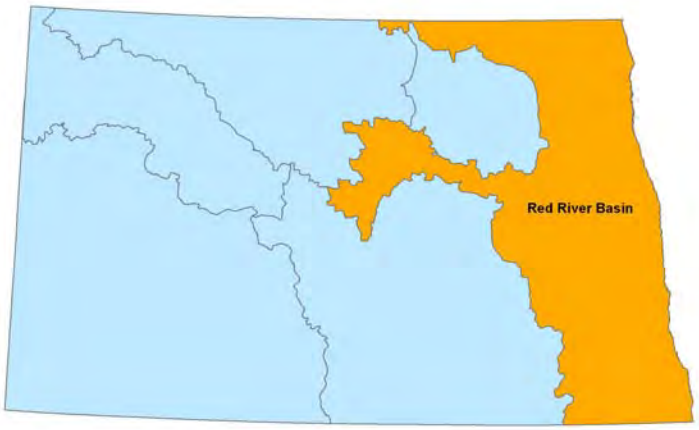
In addition, due to the rising lake levels and water expanding to nearby farms, towns and the City of Devils Lake, emergency road raises and dike building have taken place in the past few years. A majority of these road and dike raises have impacted adjacent wetlands.

Stream impacts within the Devils Lake Basin are the least likely of the state. While not impossible, most impacts within the service area will be associated with wetlands.

Conservation Planning

Conservation planning centers around the management of our soil, water, plant and animal resources. Working with the agricultural community on conservation practices to minimize soil erosion and water quality issues from fertilizer to animal waste. In addition, in an effort to stabilize Devils Lake, upstream storage by restoring wetlands and depressions has been identified as a significant factor in controlling Devils Lake water levels.

Service Area 6 – Red River Basin



Service Area Characteristics

The Red River Basin is located in eastern North Dakota. The Red River flows from South Dakota north into Canada and forms the state line between North Dakota and Minnesota. The Red River basin is a large basin encompassing all or portions of several counties including, Rolette, Towner, Cavalier, Pembina, Walsh, McHenry, Pierce, Benson, Nelson, Grand Forks, Sheridan, Wells, Eddy, Foster, Griggs, Steele, Traill, Stutsman, Barnes, Cass, Ransom, Dickey, Sargent and Richland.

Along the eastern edge of North Dakota lies the Lake Agassiz Plain. The remnant of Glacial Lake Agassiz, the landscape adjacent to the Red River is very flat with minimal wetlands and extremely fertile soils. The area is dominated by agriculture including sugar beets and potatoes.

A portion of the Red River Basin extends further west towards the center of the state. This area extends out of the Lake Agassiz Plain and gains elevation into the Northern Glaciated Plains. The area has a more undulating topography with more wetlands and less fertile soils. Agriculture still dominates the landscape but not to the extent of the Lake Agassiz Plain. A small portion of the service area, mainly found in Sargent County includes the upper portion of the Prairie Coteau extending from South Dakota. Much like the Missouri Coteau, the Prairie Coteau is higher in elevation with more native prairie and deeper intact wetlands. (USGS, 1998).

Threats and Impacts

Due to the rural setting and low population of the area, agriculture dominates the landscape. Threats and impacts include habitat loss and fragmentation related from agricultural practices. In addition, North Dakota's largest population base is found along the Red River. In larger communities, potential threats include storm water runoff and hydrological modifications.

The Red River Basin lies within the Prairie Pothole Region of North Dakota. As such, wetland drainage, CRP loss and grassland conversion are the primary threats. As commodity prices sustain historically high levels, these conversions will maintain if not increase.

The Red River Basin has different stream impact needs than the western half of the state. As the Red River seems to flood more consistently, much conversation and study has been performed to analyze remedies for the flooding. As talks of flood diversions, dikes and upstream storage continue, stream impacts associated with flood control will be a threat to the Red River and its tributaries.

Conservation Planning

Conservation planning centers around the management of soil, water, plant and animal resources. Working with the agricultural community on conservation practices to minimize soil erosion and water quality issues from fertilizer to animal waste.

Cities such as Fargo, ND that are built adjacent to the Red River have found themselves fighting flood conditions a majority of years. In an effort to minimize flooding, these cities are building higher dikes, planning for flood water diversions and studying the potential of upstream water storage.

ELEMENT VI: PRIORITIZATION FOR SELECTING AND IMPLEMENTING MITIGATION ACTIVITIES

Potential sites for ILF mitigation will target priority habitats best suited to replace lost wetland functions. As part of the DU site identification methodology, we have combined several data layers into decision tools to identify potential projects on the ground. These tools include GIS base layers of hydric soils, soil features (NRCS Web Soil Surveys), digital elevation models, land use (i.e., agricultural landscapes), development trends, National Wetland Inventory data and conservation/protected lands distribution.

In addition to the data analysis, DU will engage in discussions with our network of conservation partners (i.e., federal, state and NGO's) and draw on our relationships with landowners in the site identification phase.

Criteria for site selection will include:

A) Additional success parameters: threats from invasive species or vandalism should be low or manageable. The project will be evaluated for its ability to result in successful and sustainable net gain of aquatic resource area and/or function.

B) Multiple objectives: Projects will be evaluated based on their potential to address multiple functions and services such as improvement of fish and wildlife habitat, support for rare species, flood attenuation, water quality improvement and recreation or education values. Projects that can utilize native plant community diversity and natural processes will yield greater functional gains and be given higher preference.

C) Compatible with the surrounding landscape: Projects should be located where they compliment adjacent land uses, address limiting factors in watersheds, increase habitat diversity, reduce fragmentation, establish corridors and enhance the function of existing natural areas.

D) Project costs: Projects with high aquatic resource functional gain per dollar will be given preference.

ELEMENT VII: PRESERVATION OBJECTIVES

According to the definition in the federal mitigation rule (33 CFR 332.3(h)), preservation refers to the removal of a threat or preventing the decline of aquatic resources. The term includes activities associated with the protection and maintenance of aquatic resources through legal and physical mechanisms. Preservation does not result in a gain of aquatic resources.

Preservation strategies will be based on their potential to alleviate threats and protect functions and services, such as improvement of fish and wildlife habitat, increase native species, support for rare species, flood attenuation and water quality improvement.

In accordance with the federal mitigation rule (33 CFR 332.3(f) (3) (h)), preservation-only projects may be used to provide compensatory mitigation when the following criteria are met:

1) The resource to be preserved provides physical, chemical, or biological function for the watershed.
2) The resource to be preserved contributes significantly to the ecological sustainability of the service area.
3) The resources are under threat of destruction or adverse modifications.
4) The preserved sites will be permanently protected through a legal instrument.
5) The project manager determines the compensatory mitigation is necessary to offset unavoidable impacts to aquatic habitat.

The broad approach of DU's conservation goals leads to water quality improvements, flood control and soil and water conservation. DU's conservation mission and goals address the Mitigation Rule's requirements for preservation. Preservation shall be done to protect all aquatic resource and associated buffer restoration, establishment and/or enhancement activities. DU's conservation actions are designed to abate threats, maintain and restore functioning wetland complexes and to sustain these complexes in perpetuity.

ELEMENT VIII: DESCRIPTION OF STAKEHOLDERS' INVOLVEMENT

As the DU-ND-ILF program sponsor, DU will work closely with federal and state agencies, other conservation partners and private landowners to identify projects that take into account local knowledge and planning efforts. DU has a long history of working collaboratively with a wide variety of partners. DU will readily engage with partners in ND to evaluate wetland and stream mitigation opportunities and in the development of mitigation plans and assessment methods.

DU's team of mitigation biologists, engineers and GIS specialists can provide full service delivery of mitigation projects from site identification to land protection. Nonetheless, DU will continue to work closely with volunteers and partners to deliver projects that maximize conservation potential. Partnerships with organizations and agencies are a hallmark of DU.

DU will continue to develop and build partnerships that share common goals and understandings. For example, developing partnerships and management strategies with conservation groups and other private landowners can provide technical and financial assistance for wetland protection, enhancement and management. Partnerships will also benefit wetland dependent wildlife by improving water quality, conserving critical wetland habitat and expanding on existing conservation lands. Partnerships allow for a coordinated identification of current threats to conservation targets, implementation of management plans to abate threats and ensure long-term protection at a variety of eco-regional scales. DU will develop a diversity of partners from state, federal, private, academic and industrial entities that will provide alliances and collaboration required to achieve successful conservation results.

ELEMENT IX: DESCRIPTION OF LONG-TERM PROTECTION AND MANAGEMENT

DU will be responsible for developing and implementing a long-term protection and management plan for each DU-ND-ILF project. Draft easements or equivalent protection mechanisms will be submitted to the NDIRT as part of each project mitigation plan for review and approval. In the event the projects are implemented on publicly-owned property, long-term protection and management may be provided through facility management plans or integrated natural resource plans.

DU-ND-ILF projects will be designed, to the maximum extent practicable, to require little or no long-term management efforts once performance standards have been achieved. DU shall be responsible for maintaining DU-ND-ILF program projects consistent with the mitigation plan to ensure long-term viability as functional aquatic resources. DU shall retain responsibility unless and until the long-term responsibility is formally transferred to a long-term manager with corps approval. The long-term management plan developed for each DU-ND-ILF project will include a description of anticipated management needs and an identified funding mechanism (such as non-wasting endowments, trusts, contractual arrangements with future responsible parties or other appropriate financial instruments).

The final conservation easement or equivalent mechanism for long-term protection will be submitted to the NDIRT for review upon acquisition of the site and will be the first milestone for which credit release can occur. Upon achieving its performance standards

and approved transfer of the project for long-term protection and management, DU will request that the Corps issue written “closure certification” in coordination with the NDIRT.

ELEMENT X: PROGRAM MONITORING AND REPORTING

As detailed in Section V of the instrument, DU will submit an Annual Program Report to the IRT no later that March 31st of each year and will include program data from the previous calendar year (January 1 – December 31).

APPENDIX II: Instrument Modifications

The addition of an in-lieu project site or the expansion of a previously approved project site requires an amendment to the Instrument under 33 CFR 332.8 (g). For amendments or modifications of the instrument, DU will submit a written request for an instrument modification accompanied by appropriate documentation (e.g. mitigation plan) as detailed in 33 CFR 332.8 (d). The process for review and approval of amendments will generally follow the process for Instrument approval.

This section described the anticipated actions, responsibilities and timelines for approval of ILF projects. The actual process may vary on a case by case situation.

DU Action	**NDIRT Action**	**Anticipated Timeframe**
DU may request a site visit to a proposed site (optional)	NDIRT chair will schedule site visit with IRT members	Timeframe TBD
DU may ask for a preliminary review of mitigation plan (optional).	NDIRT chair will provide copies of plan to IRT and provide comments to DU.	30 days from receipt
DU submits mitigation plan to NDIRT chair.	NDIRT chair reviews plans and determines if plan is complete.	Notify DU within 30 days of receipt
DU submits complete mitigation plan	NDIRT chair prepares plan for public notice.	Plan goes on public notice within 30 days of receipt
		Public notice period is 30 days
	NDIRT chair summarizes comments and submits these to DU and IRT	15 days from close of public notice period.
DU reviews comments and concerns and makes revisions.	NDIRT chair facilitates discussion between NDIRT and DU.	Timeframe TBD
DU submits final mitigation plan and requests approval from District Engineer.	District Engineer will notify DU and the NDIRT members whether or not he/she intends to approve the amendment.	Within 30 days of receipt of final plan.

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