



DEPARTMENT: Natural Resources – Ecological and Water Resources

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This document was created in response to public comment on the Draft EIS. There is no Draft EIS version of this Report.

SUBJECT: Final EIS Appendix O: Takings, Flowage Easements and Acquisition Processes

During the course of preparing the Minnesota State Environmental Impact Statement (State EIS) for the Fargo-Moorhead Flood Risk Management Project (the Project) the Project Proposers¹ (the Fargo Moorhead Diversion Authority (Diversion Authority) and the U.S. Army Corps of Engineers (USACE)) have stated that they plan to mitigate many of the impacts of the Project by acquiring a flowage easement or other property interests from individual landowners whose property may be impacted by the proposed Project.² The Federal EIS, prepared by the USACE, provides that it is the responsibility of the non-Federal sponsor, e.g. the Diversion Authority, to obtain all property necessary to construct the Project.

Many questions were raised in public comments received on the State Draft EIS regarding the properties that would be acquired as part of the Project mitigation and the acquisition process that would be employed to undertake the acquisition. In response to these comments, MNDNR requested additional information from the USACE and the Diversion Authority regarding the current proposal, and as a result, identified some differences of opinion and potential gaps in mitigation as currently proposed. This memo is intended to clarify the acquisition process and mitigation requirements set forth in both the Federal EIS and the State EIS, as well as clarify multiple situations where currently proposed mitigation may not be sufficient.

I. Legal Requirements for Public Acquisition of Private Property Rights – Takings

¹ For the purpose of this memo, the Project Proposer is composed of the Diversion Authority, who is the non-Federal sponsor of the project, and the US Army Corps of Engineers. The Diversion Authority is composed of the Cities of Fargo and Moorhead, Cass and Clay Counties, the Cass County Joint Water Resources District, and the Buffalo-Red River Watershed District.

² Mitigations that have also been proposed as part of the Project but are not discussed here may also include other actions include non-structural flood-proofing measures such as landscaping, individual ring levees, elevating or relocating structures.

Minnesota and Federal Takings Requirements Generally:

The Fifth Amendment of the U.S. Constitution prohibits the federal government from taking property for a public purpose without first paying the landowner just compensation for the taking of his or her property. The Fourteenth Amendment of the U.S. Constitution makes the Fifth Amendment takings requirement applicable to the individual states. In addition, Article I § 13 of the Minnesota Constitution expressly provides: “*Private property shall not be taken, destroyed or damaged for public use without just compensation therefor, first paid or secured.*” The North Dakota Constitution also contains a taking provision which provides in part that “private property shall not be taken or damaged for public use without just compensation having been first made. . .” *North Dakota Constitution*, Art. I § 16. Thus neither a Minnesota governmental unit nor a governmental unit in North Dakota can acquire property for the project without meeting the takings requirements of both the U.S. Constitution and their individual state constitutions.

Courts have recognized two types of takings under both the U.S. Constitution and the Minnesota Constitution: (1) regulatory takings and (2) per se takings involving the physical invasion of property or an interest in property. *Penn Central Transportation Co. v. City of New York*, 438 U.S. 104 (1978)(discussing regulatory takings and takings involving a physical invasion of property); *Zeman v. City of Minneapolis*, 552 N.W.2d 548 (Minn. 1996)(discussing regulatory takings) and *State of Minnesota v. Strom*, 493 N.W.2d554 (Minn. 1992)(addressing damages associated with a physical invasion of property).

- **Regulatory Takings:** A regulatory taking occurs when a government regulation, such as a zoning ordinance so limits the ability of an owner to use their property that the government has essentially deprived the landowner of the use of his or her property. According to the U.S. Supreme Court, not every regulation gives rise to a regulatory taking nor are all regulatory takings compensable. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 93 (1922). Rather the court has looked to a number of factors to determine whether a regulation gives rise to a taking. Those factors include whether the owner has lost all reasonable and beneficial use of the property, the interference of the regulation with the owners’ investment backed expectations and the relationship between the burden imposed on the property and the purpose of the underlying regulation. *Penn Central Transportation Co. v. City of New York*, 438 U.S. 104 (1978). The mitigation measures proposed by the Project Proposers do not appear to involve a regulatory taking.
- **Per se Takings:** A per se taking involves the physical invasion, trespass, or invasion of private property by a government entity for a public purpose. The common example of a per se taking is the acquisition of private property or a portion of private property for a state or federal highway. *See generally, Antl v. State*, 19 N.W. 2d 77 (Minn. 1945). But a per se taking may also involve the taking of a property right held by a property owner as in *Causby v United States*, 328 U.S. 256 (1946) where the U.S. Supreme court recognized that continued military overflights in the airspace over a chicken farmer property was an invasion

of a property interest held by the chicken farmer and was a per se takings. Per se takings must be compensated.

Courts have long recognized a party cannot alter the natural flow of water in a watercourse causing it to flow outside of its natural course and damage the property of another. 78 Am. Jur. 2d Waters § 134 (1975) *see also Rankin v. Town of Harrisonburg*, 104 Va. 524 (Va. 1905)(holding Rankin, whose property was flooded by a city dam construction, was entitled to damages and that the city could only avoid ongoing damages to the Rankin property by taking the property). Thus if the proposed Project will cause flooding on property outside of that which would occur in the unimpeded Red River that flooding constitutes a physical invasion of property resulting from the proposed Project and is, therefore, a per se taking of private property.

Where, as here, the project will result in a per se taking of private property the government will generally acquire a fee interest or an easement interest in the property that will be flooded. This easement interest is referred to as a flowage easement and conveys to the government the right to flood property subject to the flowage easement. *See generally, United States v. Virginia Electric and Power Co.*, 81 S.Ct. 784 (1961). Where a flowage easement is obtained the property owner may still use the property subject to the flowage easement so long as his or her use does not impede the flow of flood water over the lands burdened by the flowage easement.

Calculation of Damages in Takings Cases:

When the government takes all or a portion of a piece of property for a public project under both the federal and state constitution, the government must pay the owner just compensation for the property taken. When the government takes all the property owned, just compensation is that which a willing buyer would pay a willing seller in light of the property's highest and best use assuming the project were not being built.

Damages Partial Takings

Where only a portion of a piece of property is being taken, the proper measure of damages is the difference between the fair market value of the entire piece of property before the taking and the fair market value of the remaining property after the taking. *State of Minnesota v. Strom*, 493 N.W.2d 54 (Minn. 1992). This after value includes both damages for the portion of property actually taken and any severance damage to the remainder. *State v. Pahl*, 95 N.W. 2d 85, 90 (Minn. 1959). When a flowage easement is taken the damage due to the owner is the value of the entire parcel of land prior to the taking, "less the value of the remaining tract after [the taking], considering the erosion that has occurred and will occur, the cost of riprapping for protection, and whatever other elements there may be." *M.L. Stockton and Mary Stockton v. United States*, 214 Ct. Cl. 506, 519 (U.S. Ct. Cl 1977).

Business Damages

Minnesota statute also requires a condemning authority to compensate a business owner for business damages (loss of going concern) in some unique circumstances where a business is destroyed

because of the taking of the physical property. Minn. Stat. § 117.186. This occurs when, because of the location, reputation, customer base or goodwill of the business, the business cannot be easily relocated. *Id.* For situations where a going concern is connected to the land parcel the business is on, such as an organic farm, the landowner/business owner of that parcel may be eligible for compensation for business losses.

II. Takings Process

Damages – Relocation Benefits

Finally, both the Federal EIS and Minnesota Statute require a Minnesota condemning authority to meet the requirements of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended by the Surface Transportation and Uniform Relocation Assistance Act of 1987 and the federal regulations adopted thereto. Minn. Stat. § 117.52. Thus, in addition to acquiring the property necessitated by the project, the acquiring unit of government will also be required to pay applicable relocation benefits.

Types of Acquisitions

Where it is clear that a project will result in a per se taking the government agency responsible for the project will generally acquire the property that will be taken or damaged rather than waiting for the property owner to bring a claim against the government. The governmental entity can either do this pursuant to direct negotiations with the property owner (a direct acquisition) or by exercising its power of eminent domain (i.e. condemning the property). In either instance the government is bound to pay at least the constitutional measure of damages outlined above.

A direct acquisition occurs when a private party and the government agree to negotiate a purchase of the property interest needed for the project. This process is identical to any other property acquisition between two parties. Note, however, that the owner is not required to take the purchase price offered by the government. This often happens when the private owner does not agree with the purchase price offered by the government. If the owner declines to undertake a direct purchase acquisition, the government will be forced to exercise its power of “eminent domain” and commence condemnation proceedings. Minnesota Statute § 117.036, subd. 3 requires that a Minnesota unit of government exercising eminent domain authority must first attempt to negotiate a direct acquisition before commencing condemnation proceedings.

Condemnation proceedings are a judicially supervised proceeding used to determine:(1) whether the government has a public purpose in acquiring the property and (2) the damages due to the land owner as a result of the taking. In determining damages the court will use the damage calculations outlined above but both the government and the landowner may introduce evidence to establish what damages are due to the land owner as a result of the taking.

Not all government entities have the power to condemn property. For a state agency or local unit of government to exercise eminent domain authority and condemn property in Minnesota the unit of government must have been conferred condemnation authority by the Minnesota Legislature. Thus, while the USACE requires, in the Federal EIS, that the Diversion Authority to acquire the property necessary for the Project, the Diversion Authority entity does not have the legal authority to exercise condemnation authority in Minnesota. The Diversion Authority only has the ability to acquire property in Minnesota through its individual Minnesota members: The Buffalo-Red River Watershed District, Clay County and the City of Moorhead.

The Buffalo-Red River Watershed District has the legal authority to exercise eminent domain within its boundaries to among other things, “control or alleviate damage from flood waters.” Minn. Stat. §§ 103D.201, subd. 2(1) and 103D.335, subd. 11. The Buffalo-Red Watershed District can only exercise the power of eminent domain outside its boundaries if the acquisition is necessary for a water supply system. Minn. Stat. § 103D.335, subd. 11. Thus the Buffalo-Red Watershed District may only use eminent domain to acquire property within its boundaries for purposes of the Project. The Moorhead City charter granted by the Minnesota Legislature permits Moorhead to exercise the power of eminent domain to purchase property within or outside city limits provided that it “proceed[s] in accordance with [state] law.” *Moorhead City Charter*, Ch. 9. Thus, absent a statutory amendment, Moorhead does have the authority to condemn property necessary for the Project in Minnesota, regardless of whether it is within or outside the city boundaries.

A Minnesota governmental unit exercising eminent domain authority to acquire land for the Project must do so in accordance with the requirement set forth in Minn. Stat. Ch. 117. Likewise, a North Dakota unit of government exercising eminent domain must do so in accordance with N.D. Cent. Code § 32-15-01 et. seq.

III. Takings Necessitated by the Project Outlined in the Federal EIS

Appendix G: Real Estate (App. G) of the 2011 USACE’s *Final Feasibility Report and Environmental Impact Statement* (FFREIS, 2011) outlines the impact of the Project’s Locally Preferred Plan on private properties. FFREIS App. G at 3-7. App. G identifies a number of private property interests that will need to be acquired to both construct and operate the project. The acquisition of these property interests are all necessitated by a physical invasion of private property necessitated by the construction, operation, and maintenance of the proposed Project. These property interests include:

- Flood Protection Levee Easements: A perpetual or permanent easement that permits the Project Proposers to “construct, maintain, repair, operate, patrol and replace flood protection levees” on private property. *Id.* at 7-8. This interest will be required anywhere the Project requires the construction of a Flood Protection Levee on private property.
- Fee Simple Title: This involves the transfer of title to all interests in real property to the Project Proposers. *Id.* at 8. The acquisition of property in fee simple will be required

- anywhere there is permanent construction required by the Project (with the exception of levees) such as for construction of the diversion channel or dam footings. Those properties that will be acquired in fee simple are outlined in Schedule A of App. G.
- Temporary Work Area Easement: A Temporary Work Area Easement or Construction Easement is a temporary use right that conveys to the Project sponsors the right to use private property on a temporary basis solely for constructing the Project. *Id.* at 8-9. Properties from which a temporary Work Easement will be required are also outlined in Schedule A of App. G.
 - Channel Improvement Easement: A channel improvement easement is a perpetual easement to construct, operate and maintain the channels necessary for construction maintenance and operation of the system.
 - Flowage Easements: As indicated in Section I of this memo, a permanent flowage easement confers the right to flood the property of another. The owner of the property may use the land within the flowage easement but may not impede the flow of water through the flowage easement by placing structures or other obstructions on the land covered by the easement. *Id.* at 8. Under the per se taking analysis the Project Proposers should acquire a flowage easement from any property in the upstream staging area not normally flooded by the natural flow of the Red River but which will now potentially be flooded when the Project operates at maximum capacity. Properties from which a flowage easement will be acquired are identified in Schedule A of App. G. Under the state law the owner would be entitled to damages for both the taking of the easement and any erosion or damages to the underlying fee interest. Flowage easements should be acquired assuming flood levels in the staging area at the 500-year event flood area (the capacity of the dam).

The acquisition of flowage easements of property in the staging area is identified in App. G as a primary mitigation measure for the Project. *Id.* at 5-6. Additionally, the Federal EIS acknowledges that there are some properties outside the staging area that may be impacted by the Project. The Diversion Authority and its members are responsible for undertaking these mitigation measures. For these properties, the Project Proposers will undertake an analysis to determine if flooding or damage to property will occur as a result of the Project. It should be noted that a property owner is not bound by this determination. Thus if the Project as constructed results in the flooding of property that the Project Proposers did not include in their analysis, the owner of the property can bring an inverse condemnation action or nuisance action to compel the Project Proposers to take their property or pay property damage.

The Project Proposers have indicated that mitigation is planned for all impacted structures located within the FEMA revision reach, and an analysis will determine if property will be flooded as a result of the Project, in which case the appropriate mitigation would be a flowage easement or other type of property interest from the land owner to accommodate the flooding and flooding damages. *See* Federal EIS Section 3.16.3. The Diversion Authority, the non-Federal sponsor, has indicated that it intends to analyze properties outside the staging area and structures outside the FEMA revision reach using modeling to determine where there will be impacts induced by the Project. It will then identify the scope of flowage easement needed for each property and undertake an appraisal to

assess the potential damage to the property as a first step to commencing the acquisition process. As required by state and federal law the appraisal will assess the fair market value of the property interest constituting the flowage easement plus any damages to the remaining property interests. Factors considered in determining the scope of the flowage easement acquired will include the depth, duration, and frequency in flooding. Factors considered in determining damages to the remaining property will include erosion damage, losses attributed to delayed planting, the delay in planting, yield loss, debris impacts, and limitations on future land use. The Diversion Authority plans to defer these analyses until after the project partnership agreement is signed between the non-Federal sponsors and the USACE and the design of the relevant Project features is finalized.

Once a flowage easement is acquired, the non-Federal sponsors would operate the Project without further compensation to landowners for impacts caused by operation of the Project unless actual flooding exceeds the scope of the flowage easement, in which instance an owner may be entitled to additional damages. While conditions of flowage easements and agreements with individual property owners have not yet been fully defined, the non-Federal sponsor has proposed that flood cleanup and incidental damages to private property covered by a flowage easement would remain the responsibility of the property owner, not the non-Federal sponsor.

The USACE has provided sample flowage easement language that was based on its standard language for Estates: App. G at 8:

“FLOWAGE EASEMENT (Occasional Flooding): The perpetual right, power, privilege and easement occasionally to overflow, flood and submerge (the land described in Schedule A) (Tracts Nos. __, __ and __) in connection with the operation and maintenance of the _____ Flood Damage Reduction Project as authorized by the Act of Congress approved _____, together with all right, title and interest in and to the structures and improvements now situate on the land, excepting fencing (and also excepting _____ (here identify those structures not designed for human habitation which the District Engineer determines may remain on the land)); provided that no structures for human habitation shall be constructed or maintained on the land, that no other structures shall be constructed or maintained on the land except as may be approved in writing by the representative of the United States in charge of the project, and that no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill; the above estate is taken subject to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used and enjoyed without interfering with the use of the project for the purposes authorized by Congress or abridging the rights and easement hereby acquired; provided further that any use of the land shall be subject to Federal and State laws with respect to pollution.”

The non-Federal sponsor proposes to use this sample language to establish the actual flowage easements for the Proposed Project.

The actual condemnation process for all property interests, including flowage easements, employed by the members of the Diversion Authority that will undertake the acquisitions required by the Project is governed by state statute. *See generally*, Minn. Stat. § 117.012 *et. seq.* and N.D. Cent. Code § 32-15-01 *et. seq.* In Minnesota, the formal condemnation process commences with a petition to the Court that must describe: the land or interest in land that the governmental entity proposes to acquire, the property owners of record, verification that the owners of record have received notice of the condemnation proceeding, and a request that the Court appoint three commissioners to appraise the damages that will be sustained by the owners of record as a result of the taking. Minn. Stat. § 117.02. The petition must also specify the public purpose of the taking and the condemnation proceeding may not proceed unless the Court issues an order approving the public purpose for the taking. *Id.* In Minnesota, a governmental unit may not commence a condemnation proceeding unless it has first appraised the property (i.e. determines the fair market value of the property taken and any damages to the remainder of the property if the taking is an easement or a portion of a parcel of land) and has made a good faith effort to acquire the property through negotiations with the land owner. Minn. Stat. § 117.036.

If the Court finds that the purpose of the acquisition is for a legitimate public purpose, the Court will issue an order appointing three commissioners to determine the damages owed to the landowner as a result of the taking. Minn. Stat. § 117.075. The Court's order may also designate a date at which time title to the property shall pass to the condemning authority provided that the condemning authority first pay the landowner the government's estimated fair market value of the property. Minn. Stat. § 117.042.

The Court-appointed commissioners must view the property and will hear testimony about the damages sustained by the landowner from both the landowner and the condemning authority. Minn. Stat. § 117.085. Generally both the landowner and the government will hire appraisers to testify regarding damages at the commission hearing. Minnesota statute permits the commissioners to order the government to reimburse the landowner for reasonable appraisal fees (\$1,500 for residential property and \$5,000 for all other types of property). *Id.* At the close of the commission hearing the commissioners will file a report outlining the damages they believe were sustained by the landowner as a result of the taking. Minn. Stat. §§ 117.105 and 117.115. Either party may contest the commissioner's award by appealing the award in a jury trial in Minnesota District Court in the county in which the property is located. Minn. Stat. §§117.145 through 117.185.

IV. Examples of How the Takings and Flowage Easement Process May be Applied to Areas of Consideration

The MNDNR received many public comments concerning the takings, acquisition, and flowage easement process; particularly as these mitigation measures pertained to agricultural land, cemeteries and land outside the staging area. Those three areas are discussed in more detail below. This section

includes a discussion of potential impacts, uncertainties, proposed and recommended mitigation for each land classification.

A. Agricultural Land

i. Scope of Impacts and Proposed Mitigation

During the development of the federal environmental review documents, the Diversion Authority established an Agricultural Policy Subcommittee (Subcommittee). The members of the Subcommittee included local governments and representative farmers. The Subcommittee's Goal was to identify agricultural impacts, concerns, and potential mitigation options. A one-page *Ag Impacts Mitigation Plan* has issued by the Subcommittee in January 2015. (*Minnesota Department of Natural Resources Final EIS*, Appendix J (hereinafter MNDNR-Final EIS)). This publication outlines potential Project mitigation options for agricultural lands impacted by the Project. No additional mitigation commitments for agricultural lands have been made by either the USACE or the Diversion Authority in its role as the non-Federal sponsor.

In 2013 Watts and Associates was contracted by the Diversion Authority to develop some potential mitigation approaches for Project operation. In October 2015, North Dakota State University (NDSU) published the Initial Assessment of Agricultural Risk of Temporary Water Storage for FM Diversion (NDSU Initial Ag Impact Study or Study), (NDSU October 2015). This study did not include all areas within the staging area (due to some modeling limitations). Some areas were included upstream of the staging area, but not all lands that would be affected by Project operation were studied. Until recently, agricultural impacts from the Project operation have largely been inferred from hydrology models and mapping.

An email transmittal from CH2M staff dated February 16, 2016, on behalf of the Diversion Authority, however, provides further insight on how the Diversion Authority might mitigate the Project's impact on agricultural lands. The CH2M transmittal provides:

The Initial NDSU [Ag Impact] study will help inform the appraisals of agricultural land for determination of flowage easement values. The Initial NDSU Study examined Project-caused agricultural production revenue impacts to producers in 98 storage areas defined by the hydrology model, but did not include areas along the river corridors due to data availability from the hydrology model. It concluded that 85 percent of the time, the Project will not cause upstream flooding. It also concluded that the impacts from most of the flooding events induced by the Project would end at a similar timeframe as the typical

regional planting start dates. This means that the annualized farm revenue impacts from the project are modest, but the impacts could be variable based on actual flood timing.

The extended NDSU study, which is underway and is required by state law to be completed by September 1, 2016, will incorporate additional agricultural land along the river corridors in the staging area as well as land with up to 6-inches of Project impact upstream of the staging area. The addition of these areas will add approximately 70 additional storage areas to the model. The assumptions and analysis for the extended NDSU study will be the same as the assumptions and analysis used in the Initial NDSU Study.

The MNDNR has reviewed this Study as part of its considerations in preparing the MNDNR-Final EIS. The MNDNR concluded that the study provides a good general assessment of how Project operations may impact some lands upstream of dam. However, the Study also clearly identified its limitations, as well as assumptions that could be improved upon, and it included several recommendations on what could be done to further assess what impacts the Project operation will have on agricultural production, so further study is recommended. Nor does the Study appear to address the residual impacts of flooding such as loss of top soil from previously unflooded lands, contamination from floodwater, and inability to plant because of flood debris.

The MNDNR contacted Dean Bangsund M.S., a research scientist at NDSU Department of Agribusiness and Applied Economics and a contributor to the Study. Mr. Bangsund confirmed that the NDSU Initial Ag Impact Study was not intended to present a final conclusion of the scope of potential Project impacts on agricultural production and producers. Mr. Bangsund further stated that the study should not be used as a basis of determine appropriate mitigation actions for agriculture properties impacted by Project Operation. CH2M, on behalf of the Diversion Authority, has informed the MNDNR that no further studies on the agricultural impacts associated with the Project are planned, with the exception of updated work on the NDSU study planned for the fall of 2016. This update work will not include all lands affected by the Project; it will focus on lands inundated with six inches or greater impact from the Project.

The MNDNR also consulted with the Minnesota Department of Agriculture (MDA) on a number of studies and documents on the topic of flood-caused agricultural impacts, including the NDSU Study, relevant agricultural impact information from the FFREIS, agricultural information MNDNR has obtained as part of the State EIS process, and other recommended resources developed by University extension services, and requested input from the MDA on responses to public comments received on the Draft EIS. Draft EIS public comments expressed concerns about a variety of potential impacts of the Project on agricultural land. The impacts identified in the public comments were similar to the concerns expressed by both MDA and in the NDSU Initial Ag Impact Study. Based on

these ongoing concerns the MNDNR concluded that there are still valid concerns regarding the adequacy of the proposed mitigation measures. It is a concern that flowage easements alone may not be sufficient to mitigate adverse impacts.

Currently, there are still questions related to how agricultural impacts associated with the lands' eligibility for federal crop insurance would be affected by the Project. Federal crop insurance does not cover human-induced floods. While there is some clarity on how federal crop insurance may be applied in a year when there is no Project operation, it is unclear how and if it would be applied in situations such as Project operation interfering with planting schedules, resulting in delayed planting.

The MNDNR in the State EIS also included information on organic farm practices and the unique challenges flooding poses to the ongoing operation of organic farms. MNDNR Final EIS Section 3.16 and Appendix K. The MNDNR Final EIS also included identification of organic farms within the Project area, focusing primarily on inundation that would occur during the 100-year flood event. Four organic farms were located within the Project area that could be adversely impacted by operation of the Project. The report, *Evaluation of Agricultural Risk Management Options for the FM Area Diversion Project* (W&A 2014), which was completed for the Project, identifies several potential approaches to mitigation. These are included in the list provided in Appendix J. to the EIS.

ii. Properties with unclear or unidentified mitigations:

- Organic Farms:

The Diversion Authority proposes to treat Project impacts and associated mitigations to for organic farms no differently than the impacts and associated mitigations to conventional farms. However, the Diversion Authority is working with at least one organic farmer in the staging area on an early buy-out, so that the farmer can purchase land not impacted by the Project with sufficient time to obtain organic certification on the new land. It takes approximately 3-5 years to obtain organic certification. During this 3-5 year period it takes to obtain organic certification, the Diversion Authority will rent the existing organic land to the existing producer so they can maintain organic production. It is uncertain if this approach will be acceptable to other organic farms or if additional mitigation measures will be identified by impacted organic farmers.

If other organic farmers find this early buyout to be acceptable, it could resolve the complicated issues surrounding impacts to organic farms. If this mitigation is not acceptable by other impacted organic producers, proposed mitigation would likely default back to the mitigations proposed for traditional agricultural producers.

iii. Recommendations for additional mitigations for agricultural land

- Flowage easement language should include a required adherence to an ongoing operation and maintenance plan by the holder of the easement (Diversion Authority)

which describes timelines and assigns the ongoing responsibility for clean-up to the easement holder (Diversion Authority or other operating authority) for the existence of the Project. Adherence to an ongoing maintenance plan connected with the flowage easement would also aid the tenant farmer for leased agricultural land.

- Additional mitigation should be provided to drainage ditch authorities that could be made inoperable by the Project and may need to recoup maintenance costs from repairing damaged drainage systems.
- The properties subject to flowage easements and the responsibilities of both the property owner as the holder of the burdened estate and the Diversion Authority as the beneficiary of the flowage easement, including agreed-to mitigations, should be expressly set forth on the Diversion Authority's web site, or the web site of any subsequent operator of the Project operator, for the duration of Project operation. All property owners whose property is subject to a flowage easement should be contacted by the Project operator on a 5-year basis to ensure that current property owners are aware of existing flowage easements and the obligations of the property owner and the Diversion Authority or Project operator under the terms of the flowage easement.
- The Diversion Authority and each member of the Diversion Authority should post on their respective web sites a list of the properties that it will acquire for the Project, the nature of the property interest it will acquire for each identified property, an acquisition timeline, a detailed description of the process the acquiring authority will undertake to acquire property within its jurisdiction, and a contact person(s) and contact information for contact person(s) available to answer further questions.
- For both traditional agricultural producers and organic producers, crop insurance is a topic which requires clarification prior to the development of flowage easements or Project operation. It is known that federal crop insurance is not available for man-induced floods such as that which will occur in the staging area after crops have been planted. However, details about whether this is directly applicable to the proposed Project, and occurrences when federal crop insurance may still be available to producers during years when use of the staging area is not required as a result of Project operations, are still unclear and need to be addressed. Under natural flooding conditions, an owner would be able to access flood insurance to cover planting delays or reduced yield attributable to flooding. It is not clear that these benefits would still be available to properties in the staging area.
- The status of certification or potential loss of certification, for organic farms during operation of the proposed Project should be clarified prior to development of flowage easements or Project operation.

- As an alternative to purchasing flowage easements, the Diversion Authority should consider purchasing all lands in the staging area. The Diversion Authority could then retain a flowage easement and sell the remainder subject to the flowage easement. This would allow the market to set the value of the flowage easement. As an additional option, the Diversion Authority could rent the property “as is”.
- The Diversion Authority should consider buying or renting the impacted lands. Future sales of these parcels would necessitate inclusion of the flowage easement to ensure buyers’ or renters’ awareness of the flood potential.

B. Cemeteries

i. Scope of Impacts and Proposed Mitigation

A Cemetery Study was completed by the USACE in June 2014 (2014 Cemetery Study) (<http://www.fmdiversion.com/studies-technical-documents/>). The 2014 Cemetery Study evaluated the existing flood conditions for the 10-year, 50-year, 100-year, and 500-year floods as well as what the water elevations would be at each cemetery under Project conditions. The 2014 Cemetery Study identified 54 cemeteries located within the study area that could be impacted by the Project. Cemetery Study, Figure 1. The 2014 Cemetery Study did not include areas further downstream of Georgetown as the staging area would be used to hold floodwaters upstream of the F-M area, thereby minimizing impacts downstream.

The 2014 Cemetery Study concluded that of the 54 identified cemeteries studied, 11 were potentially impacted by Project operation. The potentially impacted cemeteries are: the Lower Wild Rice and Red River Cemetery; Hoff Cemetery; Clara Cemetery; Roen Family Cemetery; Comstock Family Cemetery; North Pleasant Cemetery; Hemnes Cemetery; South Pleasant Cemetery; South Pleasant Cemetery; Eagle Valley Evangelical Cemetery; and Wolverton Cemetery. The potential Project impacts to these eleven cemeteries include damage from ice or debris; sediment or debris deposition; erosion; gravestone toppling or movement; burial and burial preparation delays; vegetation die-off; and the inability to access the cemetery.

The USACE completed a Draft Cemetery Mitigation Plan for the 11 potentially-impacted cemeteries in June 2015. The 2015 Draft Cemetery Mitigation Plan evaluated potential Project impacts, proposed mitigation for those impacts for both the 100 and 500-year flood event. The USACE proposes to use flowage easements as mitigation for cemeteries impacted by the Project operation within the staging area. It is the USACE’s position that Project impacts on cemeteries within the staging area are not a taking. Additional mitigation may be considered by the non-Federal sponsors that include clean-up assistance after Project operation.

Appendix H. Draft Cemetery Mitigation Plan, June 2015

“Summary: Mitigation for impacts to the cemeteries is not required by the Fifth Amendment because there is no taking. None of the induced flooding would be more frequent than once every ten years, nine of the 11 cemeteries would not have induced flooding at even the 10-year event, and the two cemeteries with induced flooding at the 10-year event would suffer only very minor additional flooding. In the past, flooding has caused only minimal damage to cemeteries in the area, and the induced flooding from the Project is likely to also cause only minor damage.”

However, MNDNR believes that this position is inconsistent with established federal case law which provides that the man-made diversion of waters out of their natural course over the land of another is a physical invasion of property and would be, therefore, a taking subject to just compensation. The acquisition of a permanent flowage easement may address the takings issue.

National Register of Historic Places

Cemeteries are eligible for inclusion on the National Register of Historic Places (NRHP) under Section 106 of the National Historic Preservation Act if they are integral parts of historic districts or independently qualify for listing on the NRHP. If a site has been determined eligible, the USACE would work with the respective State Historic Preservation Office (SHPO) to assure compliance with Section 106 and 36 C.F.R. 800 prior to commencement of the Project. This coordination process between USACE and the respective SHPOs has been formalized in a programmatic agreement. As of the date of this memo, 3 of the 11 cemeteries are eligible for NRHP listing and 3 have undetermined eligibility. Of these three eligible properties, only one, Clara Cemetery, is located in Minnesota.

Table 1. Cemeteries Identified by USACE to be Affected by the Project

Cemetery Name	Location	NHRP Recommended Eligibility
North Pleasant Cemetery	Cass, ND	No
South Pleasant Cemetery (Lium)	Richland, ND	No
South Pleasant Church Cemetery	Richland, ND	Undetermined
Lower Wild Rice and Red River Cemetery	Cass, ND	Yes
Clara Cemetery	Clay, MN	Yes
Roen Family Cemetery	Clay, MN	Undetermined
Hemnes Cemetery	Richland, ND	Yes
Eagle Valley Evangelical Cemetery	Richland, ND	Undetermined
Wolverton Cemetery	Wilkin, MN	No
Hoff Cemetery	Clay, MN	No
Comstock Cemetery	Clay, MN	No

In 2015 correspondence between Minnesota SHPO and the USACE, the Minnesota SHPO provided further guidance on the necessary avoidance and mitigation of impacts for the

Clara Cemetery in Clay County, MN, a cemetery eligible for listing on the NHRP. Among other recommendations, Minnesota SHPO included,

“Any required, post flood event, clean-up efforts - including repairs to structures, objects, circulation features, topography and vegetation - must be completed in accordance with the Standards and your agency should consider development of specific guidelines that "non-Federal sponsors" can utilize in these instances in order to ensure preservation of the historic property's integrity.”

Similarly, North Dakota SHPO provided a letter of concurrence to the USACE regarding the 2015 Draft Cemetery Mitigation Plan. Both SHPOs identified the potential for these NHRP cemeteries to experience a greater likelihood of adverse effects due to the operation of the Project. In addition, both SHPOs suggested that requiring the Project Proposer to assist with clean up after flood events was advisable. Both of these letters have been included at the end of the 2015 Draft Cemetery Mitigation Plan, included in the Final EIS as Appendix H.

ii. Properties with unclear or unidentified mitigations:

- **Cemeteries not eligible for NHRP listing:** There are five cemeteries that are not eligible for NHRP listing within the staging area that would be impacted by the Project operation. While flowage easements are federally required for all land within the staging area, the 2015 Draft Cemetery Mitigation Plan identifies potential mitigation efforts, but does not propose or guarantee mitigations for these five cemeteries. Because they are not eligible for listing on the NHRP, they are not subject to the protections of the Section 106 process, or the review of mitigations and avoidance by the state SHPO. Thus, it is not clear how Project impacts to these five cemeteries would be mitigated and whether mitigation would be sufficient.

- **Cemeteries outside of the Staging Area:** While flooding impacts on cemeteries outside of the staging area were identified in the 2015 Draft Cemetery Mitigation Plan (including South Pleasant Cemetery- Lium, South Pleasant Church Cemetery, Eagle Valley Evangelical Cemetery, and the Wolverton Cemetery), the 2015 Draft Cemetery Mitigation Plan provides: “No Federal mitigation is required for cemeteries located outside the staging area.” 2015 Draft Cemetery Mitigation Plan, p. 2. Since it is unknown whether these four cemeteries are eligible for listing on the NHRP, it is unknown if flowage easements or mitigations would be provided for these cemeteries.

In addition, of the 54 cemeteries identified in the 2014 Cemetery Study, twenty-two cemeteries were in the unprotected area and area south of the Proposed Project. 2014 Cemetery Study, Figure 1. Of these twenty-two cemeteries, eleven cemeteries were determined by the USACE to be impacted by the Project. These eleven cemeteries were analyzed in the Cemetery Mitigation Plan Draft Report. The other eleven cemeteries in the area upstream of the Proposed Project were not included in the 2015 Cemetery

Mitigation Plan. Ten of these eleven were not included because no additional flood impacts would result from a 100-year flood event. One of these cemeteries, Richland Church Cemetery, would be expected to have minimal additional flood impacts, (0.0027 feet), as a result of the Project.

- **Impacts to Cemeteries during events >100-Year Event:** Since the 2014 Cemetery Study primarily utilized modeling for the 100-year event but the Project is designed to address a 500-year flood event, the full extent of Project impacts is unknown. Therefore, mitigation for Project impacts on all cemeteries potentially impacted by the Project has not been defined. The 2015 Draft Cemetery Mitigation Plan discussed impacts from the 500-year event for the 11 impacted cemeteries; however, mitigation measures for impacts for cemeteries beyond those identified in the 2014 Cemetery Study is not defined.

iii. Recommendations for additional mitigations for cemeteries

- Flowage easements should be established for all cemeteries impacted by the Project prior to construction and operation of the Proposed Project up to the maximum 500-year flood event which the Project is designed to mitigate.
- Flowage easement language should include a required adherence of an ongoing operation and maintenance plan which describes timelines and assigns the ongoing responsibility of clean-up to the Project operator for the existence of the Project.
- On a cemetery-specific basis, flowage easements will be developed with any additional mitigation needed due to the anticipated impacts of the Proposed Project. These potential mitigations could include, but are not limited to, those listed in the USACE's 2015 Draft Cemetery Mitigation Plan.
- The properties subject to flowage easements and the responsibilities of both the property owner as the holder of the burdened estate and the Diversion Authority as the beneficiary of the flowage easement should be expressly set forth on the Diversion Authority's web site or the web site of any subsequent operator of the Project. All property owners whose property is subject to a flowage easement should be contacted by the Project operator on a 5-year basis to ensure that current property owners are aware of existing flowage easements and the obligations of the property owner and the Diversion Authority or Project operator under the terms of the flowage easement
- Cemetery Points of Contact (POCs) should be given timely notification of impending operation of the Project to ensure no burials are scheduled during operation of the Project. This notification should occur each time the Project operates.
- The Project Operator should set up a financial assurance account for the purpose of mitigating unforeseen impacts resulting from the Project. These impacts could involve,

but are not limited to, ground destabilization and erosion, destruction of headstones or monuments, destruction or damage of cemetery infrastructure, etc.

C. Structures and properties located outside the staging area

i. Scope of Impacts and Proposed Mitigation

The MNDNR EIS defines the Project staging area as "...a Project component that is being used as a management tool for land use/development and application of mitigation by the United States Army Corps of Engineers (USACE), such as property acquisition, easements, and programmatic agreements, and it does not constitute the total area affected by Project operation".

The FEMA/USACE Coordination Plan and FEMA mitigation requirements have been connected to many of the proposed mitigation topics, including those within this memo. The FEMA/USACE Coordination Plan requires that structures located within the FEMA revision reach be mitigated for impacts up to the 100-year flood event. This includes all areas within the staging area (the defined area required for the volume of flood water storage) and areas outside of the staging area but within the FEMA revision reach. However, the FEMA/USACE Coordination Plan does not consider mitigation for impacts to lands from Project operation.

Properties within the staging area that are inundated by the 100-year flood event are generally proposed to be mitigated, in part due to the need to maintain the storage volume needed for Project operation. All other properties outside the staging area are proposed to be the subject of an analysis to determine if a takings has occurred and mitigation is required. Essentially the USACE and the Diversion Authority propose to mitigate only those private properties where the physical intrusion arises to the level of a takings as defined under the Fifth Amendment of the U.S. Constitution. The USACE provided the following response to a MNDNR request for how this process will take place:

"USACE will perform a takings analysis for all properties outside the staging area and for structures outside the FEMA revision reach where our modeling shows there will be impacts induced by the project. The takings analyses will be performed once the PPA is signed and project designs are finalized. The Corps, with assistance from the non-federal sponsors, will acquire the information for these properties to perform the analyses. A precise timetable for how this will work in practice has not yet been determined. The analyses are part of a process internal to the Corps and will be considered privileged and not for release. "

The USACE proposes to use their modeling to identify properties that would be impacted by the Project. The analysis will consider a range of flood events. While this analysis may include events greater than the 100-year flood event, the USACE believes it is unlikely that properties only impacted by these larger events would result in a takings. However, if such

an event causes an impact that would result in a takings, that property owner would be compensated in accordance with federal law.

ii. Properties with unclear or unidentified mitigations:

Federal Takings versus State Takings

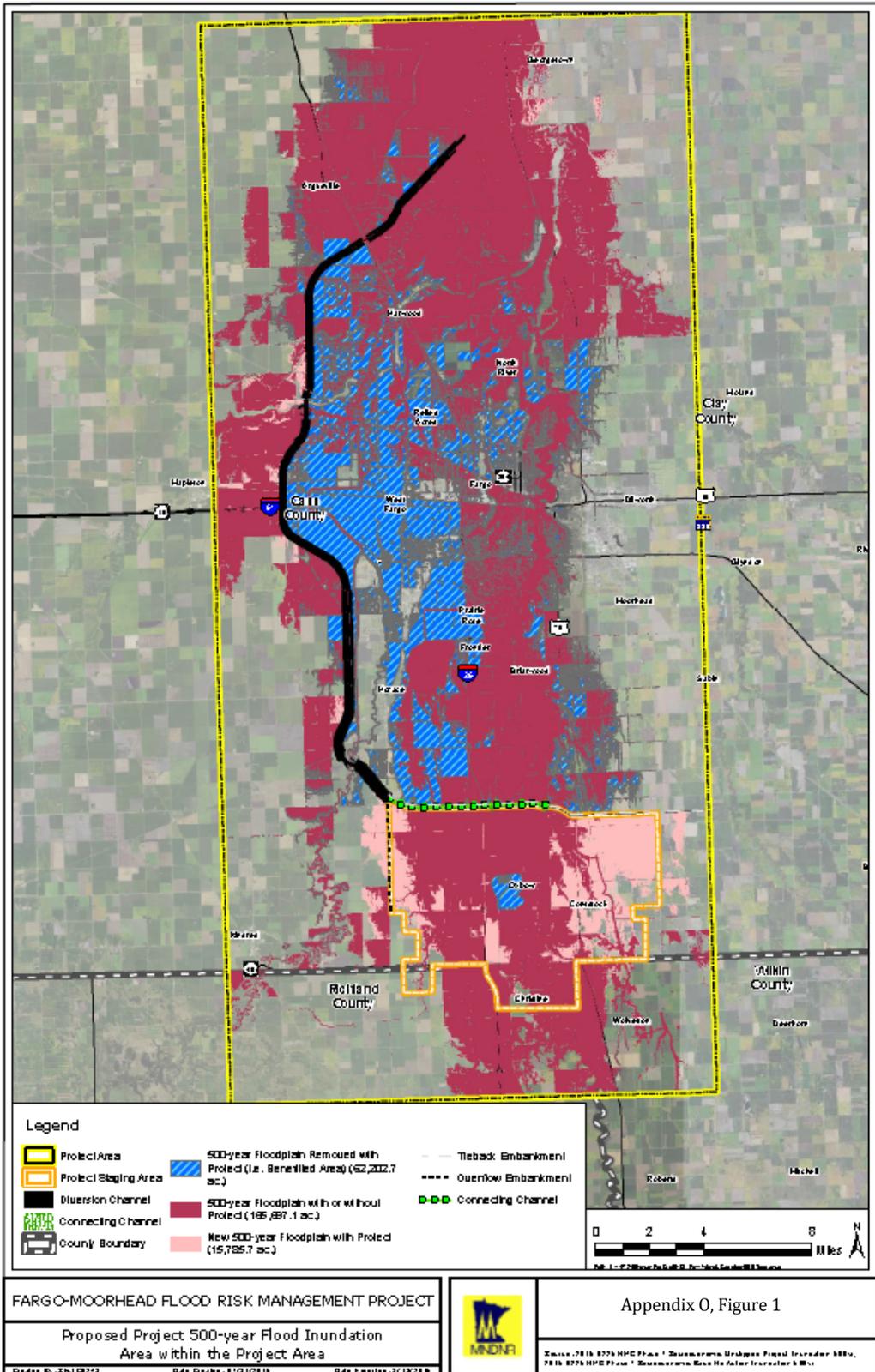
The use of the federal takings, rather than the Minnesota and North Dakota takings, to define a Project impact results in a potential gap for the proposed mitigation. As stated above, both Minnesota and North Dakota law have additional components for damages and “going concerns” that might not be considered as part of the federal takings analysis.

Uncertainty with “Taking” Determination

There is also some uncertainty that the USACE’s proposed analysis for determining whether a taking has occurred is an adequate measure of Project impacts. Because the proposed process for determining a taking is considered by the USACE to be privileged and not for release, there is no way to verify that all properties that receive additional inundation from the Project would qualify for a takings analysis that would result in a flowage easement.

Project Impacts for Flood Events Greater than the 100-year Event

USACE statements that flood events above the 100-year are unlikely to result in a takings is another potential gap in proposed mitigation. The figure below illustrates the additional acreage that would be newly included in the 500-year floodplain due to the Project that the USACE believes is unlikely to receive mitigation.



iii. Recommendations for additional mitigations

- Compensation for a taking or establishment of a flowage easement could use the same criteria as for the proposed mitigation for property within the FEMA revision reach.
- The Minnesota takings analysis criteria should be used for determining the full extent of impacts and sufficient mitigation.
- The properties subject to flowage easements and the responsibilities of both the property owner as the holder of the burdened estate and the Diversion Authority as the beneficiary of the flowage easement should be expressly set forth on the Diversion Authority's web site or the web site of any subsequent operator of the Project. All property owners whose property is subject to a flowage easement should be contacted by the Project operator on a 5-year basis to ensure that current property owners are aware of existing flowage easements and the obligations of the property owner and the Diversion Authority or Project operator under the terms of the flowage easement
- Additional mitigation should be provided to drainage ditch authorities for ditches that could be made inoperable by the Project, since these authorities may need to recoup maintenance costs from repairing damaged drainage systems.
- Use additional inundation as a measure of Project impact rather than the federal takings analysis. Modeling could be used to identify properties with additional inundation up the maximum Project operation (approximately 500-year flood event). These properties could be mitigated using buy-outs, flowage easements, or other measures.
- Landowners should be given timely notification of impending operation of the Project. This notification should occur each time the Project operates.
- The Project operator should set up a financial assurance account for the purpose of mitigating unforeseen impacts resulting from the proposed Project. These impacts could involve, but are not limited to, ground destabilization and erosion, destruction of headstones or monuments, destruction or damage of cemetery infrastructure, etc.