

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 26584
ORDER NO. 29129

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER PUBLIC COMMENTS ON THE REVIEW OF THE DELINEATION OF THE ORDINARY HIGH WATER MARK OF THE US ARMY CORP OF ENGINEERS SURVEY SEGMENTS FROM THE NORTHERN BOUNDARY OF THE FORT BERTHOLD INDIAN RESERVATION TO THE SOUTHERN BORDER OF SECTIONS 33 AND 34, TOWNSHIP 153 NORTH, RANGE 102 WEST, MCKENZIE, MOUNTRAIL, AND WILLIAMS COUNTIES, ND.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This case came on for hearing at 9:00 a.m. on the 26th day of June 2018.

(2) This hearing was called on a motion of the Commission to consider public comments on the review of the delineation of the ordinary high water mark (OHWM) of the US Army Corp of Engineers (USACE) survey segments from the northern boundary of the Fort Berthold Indian Reservation to the southern border of Sections 33 and 34, Township 153 North, Range 102 West, McKenzie, Mountrail, and Williams Counties, North Dakota.

(3) The Commission received written comments from:

- Garland Erbele, North Dakota State Engineer (Erbele)
- Nick Swartzendruber representing Northern Oil and Gas, Inc. (Northern)
- Don Key representing Continental Resources, Inc. (Continental)
- Gary Hagen representing the heirs of Henry T. Hagen (Hagen)
- Ron Ness of the North Dakota Petroleum Council (NDPC)
- Lonney White representing Whitetail Wave, LLC (Whitetail)
- Joshua Swanson representing:
 - Private property owners Mendenhall (Mendenhall)
 - Four family members LaRae Thomas, Donna Sneva, Virginia Rindahl, and Carol Moen (Family)
 - Greenstar Resources Operating, LLC (Greenstar)

- Edward Lynch owner EEE Minerals, LLC (EEE) and the Vohs family trust (Vohs)
- The Wilkinson family (Wilkinson)
- Cary Backstrand representing the North Dakota Elks Association (Elks)
- Stan Nice (Nice)
- Ed Rintamaki representing North Dakota Society of Professional Land Surveyors (NDSPLS)
- Kenneth and Linda Viall
- John Reep representing Stanford Reep (Reep)
- Julia Johnson representing AgriBank (AgriBank)
- Ron Opsahl representing Herberger Foundation (Herberger)
- Edward Grim representing family members (Grim)
- Paul van Gulick representing van Gulick Surveying, LLC (van Gulick)
- Leroy Greenshields (Greenshields)

(4) The Commission received oral comments at the hearing from:

- Nick Swartzendruber representing Northern Oil and Gas, Inc. (Northern)
- Gary Hagen representing the heirs of Henry T. Hagen (Hagen)
- Lonney White representing Whitetail Wave, LLC (Whitetail)
- Joshua Swanson representing:
 - Private property owners Mendenhall (Mendenhall)
 - Four family members LaRae Thomas, Donna Sneva, Virginia Rindahl, and Carol Moen (Family)
 - Greenstar Resources Operating, LLC (Greenstar)
 - Edward Lynch owner EEE Minerals, LLC (EEE)
 - The Wilkinson family (Wilkinson)
 - The Vohs family trust (Vohs),
- Larry Larson representing the North Dakota Elks Association (Elks)
- Stan Nice (Nice)
- Aaron Hummert representing North Dakota Society of Professional Land Surveyors (NDSPLS)
- Jodi Smith representing the North Dakota Department of Trust Lands (NDDTL)
- John Patch representing the Wilkinson family (Patch)
- HG Boe (Boe)
- Kenneth Schmidt (Schmidt)

(5) Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes the following conclusions.

(6) Comments regarding analysis methods utilized in the “Ordinary High Water Mark of the Missouri River” study dated April 2018 (Wenck Study) were received from:

- Northern: OHWM line should be moved landward due to hydraulic modeling results and other data and the Wenck Study does not accurately reflect appraisal data and apply land use exclusions;

- Hagen: Error in hydraulic model, 1951 photos are inferior and easier to tweak as owners were already kicked off land, 1949 photo quality is much better;
- NDPC: Appreciates efforts and offers no technical comments;
- Whitetail: How were areas computed in Table 2a;
- NDSPLS: Authors and reviewers of the report are not registered in North Dakota as Professional Engineer (PE) or Professional Land Surveyors (PLS);
- van Gulick: OHWM method using historical cross sections is a sound template for OHWM delineation, multiple relevant disciplines, methods, and assumptions standard and properly objective, and work is exemplary;
- NDDTL: No comment on OHWM definition, data compilation methods, methodology, legal research or other technical matters; and
- Patch: Supports HEC-RAS model and input values.

The Commission finds regarding the information provided by Northern that it has been reviewed and that the OHWM determined in the Wenck Study correctly applied the requirements of North Dakota Century Code (NDCC) 61-33.1-03; regarding Table 2a, an explanatory paragraph should be added to the report; regarding North Dakota registration, the work was performed under the direct supervision of a PE, licensed in North Dakota and his name and registration information should be added to the report; regarding PLS, this study is based on publicly available data sets and background aerial imagery, no land surveying was contracted for or completed during the course of this work, the generation of land areas based on those data sets does not constitute land surveying under NDCC definitions.

(7) Comments regarding property apportionment were received from:

- Continental: Requests areas be represented differently (to Bureau of Land Management (BLM) plats) and need listing of acres in each affected quarter section and governmental lot above and below OHWM;
- NDPC: Operators need acreage above and below OHWM by quarter section as applied to spacing units and operators need acreage allocations to accretions above OHWM and riparian to upland tracts by quarter section;
- Elks: BLM surveys don't correctly identify land plats on Williams County side - should have used ownership deeds in county recorder's office;
- NDSPLS: General Land Office (GLO) is basis of all ownership, rights to shoreline are proportional GLO - today, imported shape file - compared to well plat - found 63', 66', 87', 54' differences, there are guidelines for proper partitioning, need to publish coordinates to accurately locate OHWM on the ground or on a plat, acreages are in conflict with proper survey procedure acreages - procedures defined by federal and state law, legal descriptions are incorrectly labeled, apportionment does not follow Section 8-133 of manual of surveying;
- Herberger: Acreages should be delineated and reported to comport with Public Land Survey System (PLSS) quarter section boundaries;
- van Gulick: OHWM not a political or legislative boundary; and
- NDDTL: Need acreage by quarter-quarter for river bed and below OHWM, need accretion acreages attributable to riparian or upland landowners by quarter-quarter, need acreage below and above OHWM allocated to 2 decimal places, 27-153-99 Exhibit D,

25-154-96 Exhibit E review projects quarter-quarter incorrectly, NDDTL and industry use spacing unit references.

The Commission finds that the Wenck Study was not intended to provide accurate acreage allocations for property transfer which is outside the scope of the legislation; the data sets provided to Wenck for use in calculating acreages represent the most efficient method for determination of areas necessary for decisions by the Commission; no land surveying was done nor contracted to be done in the course of this study. The Commission also finds that the cost to complete the necessary research and surveys to apportion property significantly exceeds the appropriated funds. The Commission also finds that the Wenck contract should be amended to enable them to provide the NAD83 North Dakota North Zone State Plane Coordinates for the OHWM line and the presumptive OHWM (USACE) in an appendix format in order to perpetuate the line for use by affected parties in future land and mineral surveys and land rights transfers.

(8) Comments regarding the Bartlett and West Phase I and Phase II surveys were received from:

- Northern: Prior Department of Mineral Resources (DMR) analysis Bartlett & West 2011 - 2.5-year floodwater level and topo profile 1567.2 would inundate land inside bend and Wenck review differs from Bartlett & West;
- Whitetail: Confusion over USACE vs ND Sovereign Rights vs Barlett & West vs Wenck, did Wenck use Bartlett & West Phase II and if not why or if so when, how, and why, and why does Wenck show more below OHWM than Bartlett & West; and
- Nice: Bartlett & West study is fairly accurate for Sections 28 and 29.

The Commission finds NDCC 61-33.1-03 does not provide for use of the Bartlett & West Phase I or Phase II surveys in determination of the OHWM of the historical Missouri River bed channel.

(9) Comments requesting additional data were received from:

- Whitetail: For Table 2a columns 3-8 asking how the areas were computed, need to provide pdf copies of any and all details or documents used for calculating areas, need to provide pdf copy of map of USACE segment map Y with an overlay of USACE survey and overlays of acreage amounts in columns 4 and 7, need to provide the percentage of error in calculations used to determine acreage amounts in column 3-8, need to provide a map of columns 2, 3, 4, 7 and need to provide meets and bounds of areas above and below OHWM for tracts in column 1.

The Commission finds that adequate documentation and data for parties to determine how interests might be impacted were provided in the Wenck Study and subsequent communications. The Commission also finds that there were no land surveying tasks associated with this study and that with the addition of state plane coordinates for the OHWM lines, affected land owners will be able to have land surveys conducted on their lands in order to determine precise acreages.

(10) Comments regarding terms and definitions used in the Wenck Study were received from:

- Erbele: Definitions are from NDCC 61-33.1, inconsistent terms used - analysis, delineation, estimate, study, boundaries, determination, not an OHWM delineation - suggest study, flood flows is incorrect - suggest ordinary high flows, NDCC 61-33.1 OHWM definition is for specific reach of Missouri River minerals North Dakota Administrative Code (NDAC) 89-10-01 applies to all other navigable waters of the state, pages 2-1 and 2-2 evidence such as gage data, flood predictions, historic records and statistics are data not methods, what does damage to riparian vegetation mean, page 6-1 third paragraph should strike "provides", page 5-2 discusses reasons for modifications - movement of meander lines is listed, but should add that USACE understanding that North Dakota was ordinary low water mark (OLWM) might also be a major reason, and islands formed on the river bed after statehood should belong to the owner of the river bed as well as any accretions to those islands even if they eventually attached to riparian land;
- Northern: Agricultural productivity is the correct test and the Wenck Study used a narrow and incorrect application of North Dakota case law;
- Hagen: Accretion definition and accretions presumed to be above OHWM and not sovereign lands, the Commission should reject the Wenck Study and honor SB2134 in original form as introduced by Senator Armstrong; and
- Elks: Should use federal definition of OHWM not state case law.

The Commission finds that the recommendations of Erbele be incorporated into the report. The Commission also finds that the comments of Northern, Hagen, and the Elks above are not consistent with definition and parameters imposed by NDCC 61-33.1-03.

(11) Comments regarding the effect of the Fort Peck Dam were received from:

- Hagen: Stream flow data is from only one gauge 46 miles upstream and affected by ice jams and ignores Fort Peck Dam flood control that doubled time between floods; and
- Reep: Didn't account for Fort Peck Dam effects, Wenck Study does not account for changes to the river channel many years before dam was closed, need to address impact of Fort Peck Dam 1933-1938 and until Garrison Dam was closed.

The Commission finds that the data and analysis specified in NDCC 61-33.1-03 confines the review to the time period after the Fort Peck Dam was closed and the effects of the Fort Peck Dam are properly reflected in the USACE segment maps and river flow data used in the review.

(12) Comments regarding the legality of the Wenck Study were received from:

- Northern: NDCC 28-32-35 requires Northern be provided an opportunity to respond to comments of other parties;
- Hagen: Can't use average flows for OHWM and this is a rehash of the 2009 land grab with the same definitions, methodology and conclusions;
- Whitetail: Concerned that clear and convincing is a lower standard than beyond a reasonable doubt;
- Mendenhall: Government can't flood property then claim the valuable minerals reserved by the private owners, March 2016 BLM report - USACE segment maps are the most

comprehensive evidence, Wilkinson decision, US District court condemnation orders, uncontested for over 60 years, leased many times, and state has no interest in property and any attempt to claim an interest is an unconstitutional taking under *Wilkinson v. Board of University and School Lands of the State of N.D.*, 2017 ND 231, 903 N.W.2d 51;

- Reep: Statute contradicts state law by freezing title as of a date in 1951; and
- Wilkinson: Unconstitutional taking under *Wilkinson v. Board of University and School Lands of the State of N.D.*, 2017 ND 231, 903 N.W.2d 51.

The Commission finds that the NDCC 61-33.1-03 data specified and requirement to use the USACE appraisal documents as the presumed OHWM, making changes only upon clear and convincing evidence, were correctly applied in the Wenck Study.

(13) Comments regarding the mathematical analysis of the Wenck Study were received from AgriBank: round off error in tables.

The Commission finds that the significant figures provided in the review tables are sufficient for parties to determine how interests might be impacted.

(14) Comments not applicable to the Wenck Study were received from:

- Hagen: Loss of minerals will cost his family over \$1 million;
- Family and Grim: Cannot tell how they are affected and minerals in suspense;
- Schmidt: One-acre worth >\$4,000 per well, family losing 750 of 946 acres worth at least \$38 million; and
- Greenshields: What about lands south of Little Missouri River taken by state.

The Commission finds although this information is significant it is not applicable to the Wenck Study.

(15) Comments requesting release of claims to minerals were received from Mendenhall, Greenstar, EEE, and Wilkinson, Wenck Study concludes property is above OHWM, support any conclusion by DMR that disclaims any interest and releases any and all claims - Mendenhall recognized as rightful owner of minerals underlying the property, request release of claims since report shows property above OHWM, maps 16 and 17 pages 63 and 64.

The Commission finds that NDCC 61-33.1-03 does not provide jurisdiction for release of claims to minerals to the Commission.

(16) Comments regarding the use of professional surveyors and GLO plats were received from:

- Elks: Support NDPLS comments; and
- NDSPLS: No surveying done to establish line, term survey used too loosely should not be applied to this review, reliable subsequent surveys available, this is not a legal boundary survey, no financial interest in the outcome - concerned that work complies with land surveying rules, regulations, and accepted standards, GLO plats - upland title

originates from federal patents referenced to PLSS - current OHWM report does not reference GLO records, USACE take-line plats provide state plane coordinates, well laterals have surveys and well permits have survey plats that meet NDPLS standards and are NAD83 with precise geographic location, GLO plats are at Water Commission and well plats at North Dakota Industrial Commission - should be used for PLSS lines, rubber sheeting ownership boundaries is not acceptable, monuments can be located and projected in compliance with BLM manual, concerns regarding land surveying laws – NDCC 47-20.2-04, 43-19.1-02(11), 43-19.1-21, 43-19.1-02(8) – USACE boundaries in GIS format likely generated by digitizing and geo-referencing by unknown means makes them unreliable for land boundary determination, concerned with use of secondary source for tract boundaries, methods used to geo-reference tract boundaries, methodology used for refinements to the tract boundaries, USACE take-line plats should be used for proper development and geo-referencing of the PLSS layer, PLSS layer used to determine acreage should be derived from GLO plats, field notes, USACE take-line plats, well location plats, and subsequent survey records.

The Commission finds that the Wenck Study was not intended to provide accurate acreage allocations for property transfer which is outside the scope of the legislation; no land surveying was done nor contracted to be done in the course of this study. The term survey used in the report applies to the USACE work. The Commission also finds that the Wenck contract should be amended to enable them to provide the NAD83 North Dakota North Zone State Plane Coordinates for the OHWM line and the presumptive OHWM (USACE) in an appendix format in order to perpetuate the line for use by affected parties in future land and mineral surveys and land rights transfers.

(17) Comments regarding the USACE river definition versus the Wenck Study were received from:

- Hagen: USACE used 1949 aerial photos 1943 used for FBIR - call Billings BLM to find out - can't reveal information source and federal government says OHWM is USACE shoreline and SB2134 agrees because state can't win outside corrupt North Dakota courts;
- Whitetail: Needs map of USACE survey plat used in column 3 of Wenck Study, are column 3 USACE survey points taken from column 2 USACE segment map, USACE segment map Y should have been starting point;
- Wilkinson: USACE segment maps were the basis for land title acquisition 276.8 acres from Henry Vohs;
- Grim: State needed land to create lake, did not need minerals, disagree with any results that give state their minerals by redefining OHWM;
- Boe: 1952 and 1953 lived on ranch in river bottoms, USACE measured everything including daily river gauges, USACE took the land now North Dakota taking oil and mineral rights, should go by the USACE segment maps; and
- Schmidt: USACE condemned and acquired surface all minerals reserved.

The Commission finds that the NDCC 61-33.1-03 requirement to use the USACE appraisal documents as the presumed OHWM and make changes only upon clear and convincing evidence was correctly applied in the Wenck Study.

(18) Comments regarding the Wenck Study in USACE segment V were received from:

- Northern: Largest non-operator oil and gas company in North Dakota, significant impact N2 27-153-93, appraisal V1928 soil type, low level bottom lands, mediocre property, map 2 of 18 and 1943 aerial photo show un-sustained use and outlet channel; and
- NDDTL: Incorrect legal descriptions that disregard government lots.

The Commission finds regarding the information provided by Northern that it has been reviewed and that the OHWM determined in the Wenck Study correctly applied the requirements of NDCC 61-33.1-03; regarding NDDTL comments, results in the Wenck Study are shown with the BLM National Public Land Survey System quarter-quarter sections per NDCC 61-33.1-03 and definitions of government lots were not included in the scope of work.

(19) Comments regarding the Wenck Study in USACE segment W were received from:

- Nice: 16, 17, 20, 21-153-93 and 28, 29-153-93, USACE survey note - all oil and gas rights reserved, property only flooded a week to ten days in June usually with no harm to pasture and hay production, improved land like flood irrigation done on purpose;
- Greenstar: 1 and 2-153-94 and 23, 25, 26, 35-154-94;
- AgriBank: 28 and 29-154-94, appear to combine accreted lands in 28 and 29 and attribute to 28 only, USACE W2025 describes as un-surveyed accretion; and
- NDDTL: Incorrect legal descriptions that disregard government lots.

The Commission finds regarding the comments by Nice, Greenstar, and AgriBank that the OHWM determined by the Wenck Study in segment W correctly applied the requirements of NDCC 61-33.1-03 and that specific mapping issues may be addressed by PLS and the OHWM coordinates provided by the amended Wenck Study; regarding NDDTL comments, results in the Wenck Study are shown per NDCC 61-33.1-03 and definitions of government lots were not included in the scope of work.

(20) No comments regarding the Wenck Study in USACE segment X were received.

(21) Comments regarding the Wenck Study in USACE segment Y were received from:

- Whitetail: 100' of distortion in geo-referencing SWSW 27-154-96 - problem with geo-referencing to current photos one mile from river;
- Whitetail and Mendenhall: 1953 judgement on declaration of taking and Y2282 appraisal documents, why used USACE survey and not USACE segment map Y, needs pdf copy of USACE survey plat used, are USACE survey points taken from work done for segment map Y, explain geo-referencing issues for map 6 of 18, why is Wenck Study correct and USACE survey segment Y map wrong, discussed with BLM cadastral surveyors Josh and Blaise, is OHWM encroaching on 34-154-96, what about island USACE segment map Y map 6 of 18, was full consideration given to points of interest highlighted in yellow - need additional numbers for USACE segment map Y survey area;

- Mendenhall: 2 and 3-153-96 and 25, 26, 27, 28, 29, 32, 33, 34, 35-154-96 called subject to inundation by Lake Sakakawea but above OHWM of historic river as determined by USACE, Hess leases from Walsh demonstrate private ownership; and
- NDDTL: Missing information see Exhibit E.

The Commission finds regarding the comments by Whitetail and Mendenhall that the OHWM determined by the Wenck Study in segment Y correctly applied the requirements of NDCC 61-33.1-03 and that specific mapping issues may be addressed by PLS and the OHWM coordinates provided by the amended Wenck Study; regarding NDDTL comments, results in the Wenck Study are shown per NDCC 61-33.1-03.

(22) Comments regarding the Wenck Study in USACE segment Z were received from:

- Viall: 24-154-97 land homesteaded, belonged to grandmother, used for lumber operation from 1930's until dam was built, should grant minerals to black line on map to them.

The Commission finds regarding the comments by Viall that the OHWM determined by the Wenck Study in segment Z correctly applied the requirements of NDCC 61-33.1-03.

(23) Comments regarding the Wenck Study in USACE segment AA were received from:

- Erbele: Maps 10 and 11 of 18 show an abandoned meander still below the OHWM - OHWM should cut across the meander;
- Northern: Largest non-operator oil and gas company in North Dakota significant impact SW 12-153-98;
- Hagen: Map 9, 2 and 11-153-98, 93 acres accreted land +5.3 acres non-accreted considered frequently inundated and not suitable for agriculture, cultivated hay field with haystack, stand of thick trees - tree line defines OHWM, USACE appraisal documents show as hay land, USAF 1952 aerial photo (AA2468 national archives Washington DC) four days after peak flow of 170,000 (affected by Fort Peck Dam) accretion was not inundated like opposite side of river, 1949 aerial photo from national archives shows agricultural use, father was homesteader along river, Sections 1, 2, 11-153N-98W river mile 1517-1518 USACE segments AA2465 and AA2468 totaling 310.18 mineral acres owned by Henry Hagen, state attempting to steal 1.4 acres Lot 1 31.7 acres NENE 11-153-98, 3.9 acres Lot 4 35.7 acres and 92 acres of 93.5 acre accretion deeded to father by BLM/USACE 11-153-98, 1896 ground survey described Lots 1 and 4 11-153-98 as not subject to inundation east of river but 4' inundation of west side - east bank moved west as accretion built up, AA2468, 1951 and 1943 photos show agricultural use and tree belt, father had a saw mill on land, river hydraulics don't support inundation, must list clear and convincing evidence;
- Herberger: There is a problem with matching lines and in 11-153-98 Wenck adjusted tracts don't appear to follow USACE original tracts;
- Elks: Interest in Sections 22, 23, 26, 27, 30, 31-153-98, maps 9, and 10 don't reflect GLO or USACE, was this work GLO referenced, doesn't agree with use of definition on page 1 of Wenck Study, "[The OHWM] does not include flood plain areas adjacent to the river.";

- Family: River bottom land was ranched not disturbed by flooding, but Wenck Study lists as flooded, map 9 of 18 NENE 22 and SENW+SWNE+SWNW 23-153-98 and NENE 14-153-98, alfalfa field in 23-153-98 had cut-bank adjacent to river and did not flood except in 1961 - USACE survey AA2405 and AA2411, grain fields farmed every year, AA2410 and AA2467B un-surveyed accretion - accretions are above OHWM 61-33-01, trees were logged in 1930s; and
- NDDTL: Need public domain lands identified - examples 11-153-98 Exhibit B, 21 and 28-153-98 Exhibit C.

The Commission finds regarding the comments by Erbele, that the OHWM should cut across the meander; regarding the comments by Northern, that the OHWM determined by the Wenck Study along the Northern property is located at the edge of an eroding bank of the river and correctly applies the requirements of NDCC 61-33.1-03; regarding the comments by Hagen, that given the additional information and upon review of the OHWM determined by the Wenck Study that it should be amended to exclude areas with demonstrated agricultural practices including hay lands and the value for agricultural purposes is destroyed at the level where significant, major, and substantial terrestrial vegetation ends or ceases to grow; regarding comments by Herberger and Elks, that specific mapping issues may be addressed by PLS and the OHWM coordinates provided by the amended Wenck Study; regarding the specific comment by Elks that the OHWM does not include flood plain areas adjacent to the river, this is not consistent with the requirements of NDCC 61-33.1-03; regarding comments by Family, given the additional information and upon review of the OHWM determined by the Wenck Study that it should be amended to exclude areas with demonstrated agricultural practices including hay lands; regarding NDDTL comments, results in the Wenck Study are shown per NDCC 61-33.1-03.

(24) Comments regarding the Wenck Study in USACE segment BB were received from:

- Erbele: Maps 10 and 11 of 18 show an abandoned meander still below the OHWM - OHWM should cut across the meander;
- Elks: Section 36-153-99 ownership, Map 11 doesn't reflect GLO or USACE, was this work GLO referenced; and
- NDDTL: Need public domain lands identified - examples 34-153-99 and 6-152-99 Exhibit A, incorrect legal descriptions that disregard government lots.

The Commission finds regarding the comments by Erbele, that the OHWM should cut across the meander; regarding comments by Elks, that specific mapping issues may be addressed by PLS and the OHWM coordinates provided by the amended Wenck Study; regarding NDDTL comments, results in the Wenck Study are shown per NDCC 61-33.1-03.

(25) No comments regarding the Wenck Study in USACE segment DD were received.

(26) Comments regarding the Wenck Study in USACE segment EE were received from:

- Reep: 31-154-100 - homesteaded and title granted - purchased by Fred Frye - purchased by Amy Reep, aerial photos show above water except for occasional flooding, river encroached during 1940's then moved until no longer passing through property, should find Reep property to be above OHWM - were above for over 50 years - arguably above

at present, state recognized ownership in 1955 - Old Age Mortgage and State Welfare board - approved purchase of mineral interest in 1979 accepted state estate tax and interest.

The Commission finds regarding the comments by Reep, that the OHWM determined by the Wenck Study in segment EE correctly applies the requirements of NDCC 61-33.1-03.

(27) Comments regarding the Wenck Study in USACE segment GG were received from:

- EEE: 6 and 7-153-101, surface acquired by USACE Voh's predecessors reserved minerals, USACE segment maps were the basis for land title acquisition 276.8 acres from Henry Vohs; and
- Wilkinson: 12-153-102, surface acquired by USACE Wilkinson predecessors reserved minerals, Lois Jean Patch - grew wheat, photo of brothers combining, Vaness Blaine drove grain truck during harvest on property.

The Commission finds regarding the comments by EEE and Wilkinson, that the OHWM determined by the Wenck Study in segment GG correctly applies the requirements of NDCC 61-33.1-03.

(28) Comments regarding the Wenck Study in USACE segment HH were received from:

- Erbele: Map 17 of 18 shows an island below OHWM as owned by United States Department of the Interior (USDOI), what is the basis, North Dakota should have title to islands formed in the bed of the river;
- Wilkinson: 13-153-102, page 174 HH3190 Wilkinson property 4' above model OHWM, 1958 aerial photo and newspaper clipping show property under cultivation and highly productive of ordinary agricultural crops; and
- Schmidt: 22, 23, 24, 25, 26-153-102 acquired in 1930s for taxes, harvested willows for fence posts and cultivated hay land.

The Commission finds regarding the comments by Erbele, that the reference to the island as owned by USDOI is from the USACE segment map and shall be amended to show it as state owned; regarding the comments by Wilkinson and Schmidt, that the OHWM determined by the Wenck Study in segment HH correctly applies the requirements of NDCC 61-33.1-03.

(29) Comments regarding the Wenck Study in USACE segment KK were received from EEE: Wenck Study pages 63 and 64 as well as page 175 segment map KK3371.

The Commission finds regarding the comments by EEE, that the OHWM determined by the Wenck Study in segment KK correctly applies the requirements of NDCC 61-33.1-03.

(30) In consideration of all the comments received, the Commission further finds that the OHWM should be reviewed in its entirety using the requirements of NDCC 61-33.1-03.

IT IS THEREFORE ORDERED:

(1) The contract with Wenck shall be amended to provide the NAD83 North Dakota North Zone State Plane Coordinates for the OHWM line and the presumptive OHWM (USACE) in an appendix format in order to perpetuate the line for use by affected parties in future land and mineral surveys and land right transfers.

(2) The amended Wenck Study as indicated in this order shall be the determination of the OHWM for USACE segments V, W, X, Y, Z, AA, BB, DD, EE, GG, HH, and KK.

(3) The Wenck Study shall be amended to:

- Use consistent terms – determination and study in place of analysis, delineation, estimate;
- Change “Missouri River Bed” to “Historical Missouri River Bed” in the title;
- Use “ordinary high flow” in place of the word “flood”;
- Indicate that NDCC 61-33.1 OHWM definition is for specific reach of Missouri River minerals;
- Edit pages 2-1 and 2-2 such that gage data, flood predictions, historic records and statistics are information or data and not methods;
- Edit Section 2.2 to include the following definitions - “Islands and accumulations of land formed in the beds of streams which are navigable belong to the state, if there is no title or prescription to the contrary. The control and management, including the power to execute surface and mineral leases, of islands, relictions, and accumulations of land owned by the state of North Dakota in navigable streams and waters and the beds thereof, must be governed by Chapter 61-33.” NDCC 47-06-08. “Islands in navigable waters are considered to be below the ordinary high watermark in their entirety.” NDAC 89-10-01-03(7). Islands that were formed prior to statehood as dry, fast lands, however, remain held by the federal government and did not pass to the state through the Equal Footing Doctrine. *State v. Loy*, 20 N.W.2d 668, 671-672 (N.D. 1945); *Scott v. Lattig*, 227 U.S. 229, 242-243 (1913). “If a stream, navigable or not navigable, in forming itself a new arm divides itself and surrounds land belonging to the owner of the shore and thereby forms an island, the island belongs to such owner.” NDCC 47-06-10.
- Replace the phrase “damage to riparian vegetation” with “causing inundation long enough that would destroy significant, major, and substantial terrestrial vegetation useful for agricultural purposes”;
- Edit page 5-2 to add the following paragraph after the second paragraph “Another reason for the differences between the OHWM determination of this report and the USACE survey, as pointed out by the State Engineer, may be that the presumption the USACE condemned riparian land to the OHWM may be in error. The USACE may have acquired riparian land to the ordinary low water mark (OLWM). Title to the bed and banks, up to the OHWM, of navigable waters passed to the state incidental to statehood under the Equal Footing Doctrine. See *State ex rel. Sprynczynatyk v. Mills*, 523 N.W.2d 537, 539 (N.D. 1994) (citations omitted). NDCC 47-01-15 states that “. . . the owner of the upland, when it borders on a navigable lake or stream, takes to the edge of the lake or stream at low water mark.” This has been construed by the North Dakota Supreme Court as a rule of construction applicable to limited instances where the state

contractually grants or conveys parts of its equal footing interests so as to avoid an interpretation that would gift title to an upland owner in violation of the anti-gift clause language of N.D. Const. Art. X, § 18, (see *Reep v. State*, 841 N.W.2d 664, 675 (N.D. 2013)). However, it was likely understood to be the law at the time the USACE was condemning land for the Garrison Reservoir. Since it may have been interpreted by the USACE that the riparian took title to the OLWM of the Missouri River, the USACE would have sought to acquire all riparian lands to the OLWM”;

- Edit the report in response to the above, clarifying that the USACE survey may be to the OLWM; remove references to the USACE OHWM determination;
- Edit page 6-1, third paragraph to delete the word "provides";
- Edit page 6-1 to include the following paragraph after the third paragraph “These areas shown in Tables 1 through 2b are for the purposes of estimating the overall effect of the study and not for property transfer purposes. The areas for each property will need to be determined by a PLS. The coordinates of the OHWM from this study and the presumptive OHWM determination (USACE) are provided in Appendix F and will be available digitally from the DMR website for this purpose;
- Edit page 6-1 to include a description of each column of Table 2a;
- Review and amend the OHWM according to NDCC 61-33.1-03 based on all the information received and indicated in this order; and
- Add an Appendix F to include the coordinates of the OHWM from this study and the presumptive OHWM determination (USACE).

(4) For USACE segment V, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(5) For USACE segment W, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(6) For USACE segment X, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(7) For USACE segment Y, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(8) For USACE segment Z, the Wenck Study determination of the OHWM shall be amended based on review of roadway and farming noted in 28 and 29-154-97 and shall be determined to be the OHWM for that reach of the Missouri River bed.

(9) For USACE segment AA, the Wenck Study determination of the OHWM shall be amended based on information provided by Hagen, Family, and Erbele and shall be determined to be the OHWM for that reach of the Missouri River bed.

(10) For USACE segment BB, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(11) For USACE segment DD, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(12) For USACE segment EE, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(13) For USACE segment GG, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(14) For USACE segment HH, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

(15) For USACE segment KK, the Wenck Study determination of the OHWM shall not be amended and shall be determined to be the OHWM for that reach of the Missouri River bed.

Dated this 27th day of September 2018.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Wayne Stenehjem, Attorney General

/s/ Doug Goehring, Agriculture Commissioner