A REPORT ON

The implications concerning agricultural irrigation by overreach of the Clean Water Act, CWA, enforced by the Environmental Protection Agency, EPA, and the Idaho Department of Environmental Quality, IDEQ, concerning the TDML 2016 report on Indian Creek and the ramifications of requirements placed on the City of Nampa, Idaho concerning the

Nampa Waste Water Facility

By Ronald M. Harriman

The following conclusions are based on factual historical records, and existing data from within the EPA, CWA, Idaho Law and Idaho DEQ

Legal precedents from SCOTUS and Rules from the U.S. Corps of Engineers and the EPA

Preface

I was asked to review the 2016 Total Daily Maximum Limit or TDML developed by the IDEQ as it applied to the demands for upgrading the Nampa Waste Water Facility. The following are my independent conclusions concerning this issue. I will admit that I come to this issue with a degree of ambivalence as a lifelong fisherman and native of Idaho I have observed the pollution and decline of water quality within this states Snake River and observed the extreme pollution within the Mississippi and Hudson Rivers. In my opinion the control of pollution within our surface waters must be of ultimate concern and must be curtailed. However; as most laws passed by Congress, refined by administrative law and subsequently by our courts, they often fail to competently fulfill the objectives with a reasonable solution. Such is the case of the listing of surface water within Idaho.

This report addresses only three issues with recommendations.

I The First, the classification of the surface water of Indian Creek.

- **a. Identification of the water source.**
- **b. Salmonid Spawning and temperature.**
- **c. Discussion of Point and Non-Point**

II The Second, the present downstream effect of the temperature and Phosphorous from the Nampa Waste Water Facility and the Phosphorous remediation feasibility.

III The Third, the legal authority, previous SCOTUS decisions and the "New Water Rule's" applicability.

- **a. Decisions by SCOTUS**
- **b. The CWA rules applicable to Indian Creek**

c. The Idaho statutes and responsibility of the Director of the IDEQ to review and correct water mis-classifications.

I

Classification

a. The Mis-Classification of Indian Creek

The IDEQ was required to classify all surface water within the state by the implementation of the CWA. In doing so they identified Indian Creek as a perennial body of water with a surface classification of Cold Water Salmonid Spawning and a secondary use of Recreation. The implication of this classification is that with this identification it is then protected water similar to natural sourced water. This mandates water quality controls which were never meant to be applicable to agricultural canals, ditches or drains.

Is it a ditch? Yes, the historical documents identify the source of water within the naturally dry creek bed geologically described as Indian Creek as seepage from irrigation as no flowing water from any source existed on the southern bench of the Boise River prior to the construction of irrigation canals. The length of the Indian creek drainage is 60+- miles the upper 35 miles of the reach is dry with manmade ponding. The part of the lower section starting at Kuna is converted to the New York Canal for 4.5 miles at which point the entire water stream is diverted into the manmade canal known as The New York Canal. The remaining length of the drainage is approx. 16.4 miles. This section is the section that is MIS-IDENTIFIED by the Idaho DEQ. The water is seepage from irrigation, runoff from roads, urban areas, the Nampa Waste Water effluent, feed lots, industry and agricultural irrigation. Should irrigation cease, all of the water on the southern bench of the Boise River would dry up and return to the upland condition existing before irrigation began. This multiple sourced water combines with the Wilson Drain near Caldwell. The confluence of these drains form the stream flowing through Caldwell identified as Indian Creek. When it passes through Caldwell the entire flow is diverted into the Riverside Canal during the irrigation season which is Seven months (7). It is used to irrigate and is completely consumed by the agricultural lands west of Caldwell. Any unutilized excess irrigational water during the irrigation period eventually enters the Snake River as a nonpoint source drain in the Homedale area. This factor alone identifies the Indian Creek flow as intermittent as decided in Rapanos vs U.S. IE; "The Government's allegations reflect that the Low Line Canal meets the statutory and regulatory definition of "waters of the United States" as a tributary connected to a navigable waterway. Because water flows through its channel seasonally and continuously for a six to eight month irrigation season each year, it meets both the "relatively permanent" and "significant nexus" standards set forth in the plurality and concurrent decisions set forth in *Rapanos v. United States,* 547 U.S. 715, 126 S.Ct. 2208, 165 L.Ed.2d 159 (2006)." Indian Creek waters do not flow into U.S. Water more than 5 months during the year and never 6 months.

The factual description of the function of Indian Creek is not a Creek, but is an agricultural Drain as identified by excerpts of the historical records and studies 1-3 below. Electronic links to the full reports are also posted. This is also followed by a link to Google Earth which allows a full view of the Indian Creek Drainage on 6-27-2017 after a winter with a 140% snow load. State Law limits regulation of agricultural ditches and drains. The IDEQ regulation 02. Man-Made Waterways. Unless designated in Sections 110 through 160, man-made waterways are to be protected for the use for which they were developed.

To clearly identify this mis-classification, below is a comparison

of the hydrological sources of Indian Creek and its tributary Wilson Drain

Indian Creeks hydrology is completely sourced by irrigation seepage and surface runoff from fields and lateral smaller irrigation ditches. The part of this channel that carries water is only 16 miles of its 60 +- mile length. It flows at from 10 to 5 cubic feet seconds or CFS above the Nampa Waste Water Facility, NWWP. At the facility the flow is increased by an average of 14 CFS by the effluent discharge. Wilson drain's hydrology is identical, sourced by an artisan flow from irrigation seepage which is augmented by pumping ground water from 8 wells to provide water for the Idaho Fish Hatchery located in south Nampa, Idaho and flows at between 30 CFS at the hatchery and 40 CFS downstream depending upon the irrigation water drained from the surface ditches. Its total length is 14.4 miles. The difference between the two, Wilson Drain AKA Wilson Creek is a manmade irrigation drainage ditch. Indian Creek's channel is a dry water formed gulch through which irrigation seepage flows. The hydrology of the Wilson Drain is identical to Indian Creek. However, unlike Indian Creek, it is correctly classified as a drain by the IDEQ which exempts it from regulation under Idaho law.

Listed below are three sources confirming the above statement that Indian Creek is an agricultural drain not a creek. Comments follow:

1. **A history of the Nampa and Meridian Irrigation District (Stevens 2010)**
   http://www.shraboise.com/docs/Water-in-the-Boise-Valley-NMID.pdf
   http://www.moffatt.com/wp-content/uploads/2014/05/Irrigation-Water-Drainage-Development-in-the-Treasure-Valley-Scott-Campbell.pdf

Synopsis: Indian Creek is and was basically the geological description of an intermittent creek bed. No water flowed in the creek other than spring runoff and flooding from rain for the length of the creek bed. When the area was developed for agriculture in the 1800s water began appearing from the seepage and spills from the irrigation. Some agricultural dams were built east of Kuna that retained some of the spring moisture. Notably the Indian Creek Reservoir along I-84 south east of Blacks Creek and some small containments closer to Mora, but historically the bed remained dry. When the New York Canal was constructed a section of the Indian Creek bed was utilized to carry water for the canal westward to near the Canyon County line where they constructed the New York canal to carry water through the farm land forming lake Lowell. When they did this all of the water that may have been in Indian Creek was appropriated into the NY Canal leaving the lower creek drainage without a natural source. The water now existing in the creek bed is seepage from the near surface aquifer formed from the activities of humans in the process of irrigation.

2. **A CH2MHill report PREPARED FOR: Lower Boise River Watershed Advisory Group (WAG**
   https://www.deq.idaho.gov/media/450539-_water_data_reports_surface_water_tmdls_boise_river_tribs_boise_river_tribs_apps.pdf

PREPARED FOR: Lower Boise River Watershed Advisory Group (WAG)

PREPARED BY: Tom Dupuis, Sherrill Doran

COPIES: Tom Krumsick

DATE: May 15, 2001

"Although the waterbodies addressed in this document are referred to as tributaries of the Lower Boise River and carry the label "creek", all of the waterbodies function to convey irrigation water and are not typical tributaries as would be expected in natural riverine environments. Between the mid 1800s and early 1900s, an estimated 465 miles of man-made canals, ditches, and laterals were constructed to convey irrigation water throughout the river valley (U.S. Bureau of Reclamation [USBR] 1996). The irrigation conveyances were historically constructed by straightening or deepening either 1) existing creek drainages or 2) slight depressions or swales that carried spring run-off toward the river. Presently, these tributaries are essentially ditches that carry water primarily throughout the irrigation season, which is generally defined as early-April to mid-October (USBR 1996). As a result of long-term and wide-spread irrigation activities, groundwater levels have risen throughout the valley and now contribute to return flows that may be present in larger canals during the non-irrigation season."

Data Summary and Recommendations pg. 16

A summary of available data for each of the tributaries is presented in Table 4.
To determine attainable beneficial uses, all three types of data (physical, chemical, and biological) must be evaluated. In this case, habitat conditions (i.e., physical characteristics) for all of the tributaries dominates the determination of attainable beneficial uses because the waterbodies are not typical "creeks" as would be expected in a natural riverine system. While Upper Indian Creek has been modified from its original natural state, Mason Creek and Sand Hollow Creek were constructed or modified specifically to convey irrigation water over a century ago (USBR 1996). As such, these reaches are used for irrigation purposes on a largely intermittent basis and these ditches are generally lacking suitable habitat for reproducing coldwater biota populations. The creeks are characterized by poor sinuosity and poor canopy cover, which is typical along ditches in rural irrigation areas. In addition, the substrate is comprised primarily of silts and sands. The few gravels and cobbles that are present are highly embedded.
The lack of consistent riparian buffer zones, due to continued urban encroachment and contractual management activities, intensifies the sediment problem. Normally, riparian buffer zones trap naturally-eroding sediment and prevent it from entering the waterbody. In this situation, agricultural activities (including surface run-off of irrigation water) and grazing activities increase the amount of eroded sediment that reaches the waterbody. Furthermore, the irrigation districts have a legal responsibility to their customers to provide water and maintain the function of the ditches. The resulting dredging activities dramatically alter the substrate and the adjacent riparian areas where the dredged materials are placed.
Transforming these ditches, which were not created or modified to provide good-quality aquatic habitat, into suitable waterbodies for coldwater fish populations is not feasible. These three tributaries alone consist of almost 100 miles, over half of which is used exclusively for irrigation conveyance. This length doesn't take into account the other hundreds of miles of canals and drains in the valley that are used for similar purposes. Creating good-quality habitat that will support coldwater aquatic life throughout the length.

3. Report on pollution Problems in Indian Creek by the Idaho State Department of Health 1959

Indian Creek is located in Ada and Canyon Counties in Southwestern Idaho. It has its origin about thirty miles southeast of the City of Nampa. It is a small meandering stream above Nampa and is fed mainly by irrigation runoff and seepage water. However, from Nampa to Caldwell (see Fig.1) the stream grows in size because of its junction with several drain ditches, the largest being Wilson Drain which, at times, has twice the volume of Indian Creek. During the winter months, the stream has its termination in the Boise River about two miles below Caldwell. However, during irrigation season, nearly all of the stream is diverted into what is then called the Riverside Canal. This water is used by the Riverside Irrigation District south of Parma. *Note:(this is a factual condition according to Andy with the Parma Irrigation district on 5-14-2018. The diversion continues until 10-15 to20 each year at that point the water from Indian Creek then flows into the Boise river)*

Source http://forums.idaho.gov/media/433886-wqs3_indian_ck_1959.pdf

Summation of Mis-classification

The reader can easily determine no natural source of water existed on the southern bench of the Treasure Valley prior to irrigation and the water within Indian Creek is not from a natural source but an artificial source; **IRRIGATION**. Factually, the true classification of Indian Creek is an Agricultural Drain and should be so classified.

b. Salmonid Spawning and temperature

This is the main reason that the IDEQ is requiring the cooling of the Nampa Waste Water Effluent and as shown within this document is not attainable.

Ascertaining the water as Cold Water salmonid spawning exceeds the factual real condition as most Salmonids spawn after the date when the head gates are closed at the Riverside Canal. When the gates are closed access upstream for fish to come into the water is prevented. The earliest Salmonid to spawn in these waters is the cutthroat trout (Oncorhynchus clarkii) which begin spawning in late March. The heat of the Indian Creek water is also a concern of the IDEQ but both of the reports from Dupuis 2001 and the report on pollution by the Department of Health Engineering and Sanitation Section entitled "Report on pollution Problems in Indian Creek" 433886-wqs3_indian_ck_1959. Remark that the heat above the NWWP is caused by solar radiation. In the 2016 TDML the IDEQ discusses the temperature of the water as a crucial physical condition and requires the temperature of the water to be 13 deg C (55.4F) with a maximum of 22 deg C (71.6). The science behind this attainment is highly questionable. As the ground temperature throughout, Southern Idaho at 3-8 feet will be at 52-56 Deg. F year around and with all of the water being seepage within the artificial high-water aquifer it will enter the stream at 54+- deg. F. proof of this statement is exhibited within the Idaho Fish and Game fish hatchery located within Southern Nampa where there existed a post irrigation flow of water which was utilized for a private fish hatchery. The IF&G purchased the hatchery in 1982 and subsequently drilled 8 wells to augment the seepage flow. The water temperature at the point of beginning is reported to be 59 Deg. F year around. This exceeds the temperature required by the IDEQ by 5+- Deg. F and is most

indicative of the true temperature of the water seeping into Indian Creek. The water entering Wilson Drain at the point of discharge is 30 CFS. In comparison, the shallower, slower flow of the meandering Indian Creek Drainage during the spring, summer and fall with solar radiation would easily allow the temperature of that water to exceed the upper range limits allowed in the 2016 TDML. Further support for nonattainment are the following reports.

The CH2MHill report **PREPARED FOR**: Lower Boise River Watershed Advisory Group (WAG, also as referred to as Dupuis 2001 in the Indian Creek 2016 TDML identifies Indian Creek above the confluence with Wilson Drain as follows.

"It is important to comment on the use of the terms "impaired" and "degraded." Throughout this document, these terms are used to describe conditions in the subject reaches. These descriptions do not imply that the creeks were once pristine and have since been impaired and degraded. Rather, the terms are used to compare conditions in the subject reaches to typical pristine reference environments. These creeks were never intended, constructed, or managed to be pristine riverine environments; describing these systems as "impaired" and "degraded" reflects the typical nature of irrigation conveyance canals.

Biological Parameters–Fish passage into this reach is blocked on the downstream end by Riverside Diversion Dam and on the upstream end by the New York Canal. Before 1986, a wild rainbow trout population was known to exist in this reach based on electrofishing sampling and fish kill assessments (IDFG 1997). In 1986, at least 1,100 wild rainbow trout were killed following an accidental waste discharge from the Armour Fresh Meats Company in Nampa. IDFG (1997; Grunder, pers. comm. 2000) is not aware of any recovery since the spill. Further, IDFG has concluded that aquatic biota in Indian Creek are impaired and IDFG does not track wild fish populations in Indian Creek because fish habitat conditions are so degraded. In November 1999, IDEQ conducted electroshocking in this reach (Figure 12) and observed four rainbow trout that ranged in length between 160-300+ mm (IDEQ 2000a). No young-of-the-year or juveniles were present in these collections.

Compounding this observed condition is the IDEQ intent to restore the creek. In a 5-19-2018 response from Director of the IDEQ John Tippets the intent of the IDEQ is identified. "The Clean Water Act applies to Indian Creek, and DEQ is obligated to restore and maintain the waterbody's designated uses and any existing uses that have been attained in the waterbody on or after November 28, 1975. The historical modifications to Indian Creek's hydrology created a waterway that has supported cold water aquatic life, including wild rainbow trout, before and after November 28, 1975 (Dupuis, 2001). Accordingly, cold water aquatic life is not only a documented existing use, it has also been a designated use in the State of Idaho's Water Quality Standards since 1973 (IDAPA 58.01.02. 140.12). DEQ is required to protect the water quality of Indian Creek in accordance with the cold water aquatic life use designation and standards associated with that use."

Nampa Waste
Water and Indian Cr

The full 5-19-2018 email
The problem here is what they intend to restore? Is it the Creek that never existed or the historical condition of the seeping irrigation and drain field water which has always been used as a drain for removing waste materials, chemicals and irrigation water? The history of this drain identifies a highly contaminated body of water as is identified by a 1959 report from the State Department of Health Engineering and Sanitation Section entitled "Report on pollution Problems in Indian Creek" 433886-wqs3_indian_ck_1959. Source http://forums.idaho.gov/media/433886-wqs3_indian_ck_1959.pdf

As the State Dept. of Health report precedes the digital age I did not copy and paste applicable data which the reader can easily access by opening the above link.
I have not found any study that describes Indian Creek as a Cold Water Salmonid Spawning body of water other than the IDEQ prepared 2016 TMDL. The only historical references identify the water body as a drain.

In Summation:

The Indian Creek channel waters were never more than a drain and were never suitable for Salmonids nor were they ever comparable to a natural creek. The physical condition of the water concerning heating is uncontrollable above the NWWP where not only does it enter the stream at a higher temperature than the 2016 TDML requirement , but it is heated by solar radiation and below the NWWP the water is mixed with volumes of water which are 22 times greater than the flow of Indian Creek and at a higher temperature making the cooling of the effluent from the NWWP ineffective. If restored, to the past condition the water would be condemned. This section is unattainable by environmental and geographical existing conditions.

c. Discussion of Point and Non-Point

During the research for this report it became apparent that the designation of the Nampa Waste Water Plant (Facility) as a point source is only applicable if Indian Creek is classified as a Cold Water Salmonid water body. As this is the wrong classification technically and factually, the water identified as the Indian Creek stream is irrigation drainage, then the entrance of the flow into navigable water if any must bear the description of a Non-Point source. The water flow from the New York Canal split is as proven above, is seepage from irrigation, septic systems, and returning excess irrigation water from service ditches. When it reaches the NNWP the effluent from the plant is infused, mixed with the flow of the stream. From that point the water flows toward Caldwell picking up more seepage and excess irrigation water eventually being mixed with the Wilson drain water which exceeds by twice the volume of the Indian Creek flow. From that point it flows through Caldwell and is joined by the Riverside Canal flow of 277 CFS which is close to 20 times the CFS from the Indian Creek flow which includes the NWWP effluent. During the irrigation season from Mid-March through October 20 or 7 months, the flow of water continues within the manmade canal

to irrigate the agricultural areas West of Caldwell and due to full utilization of the water for irrigation eventually empties only 5-8 CFS of excess irrigation water into the Snake River near Homedale. This does not fulfill the Kennedy decision of "Significant Nexis" to be identified as more than an irrigational drain. But does fulfill the requirement to be "Intermittent" as it flows into U.S. Water only an average of 5.5 months of the year. During the winter months from October 20 to the first day of April the water from the Indian Creek Flow enters the Boise River 2 miles West of Caldwell city center.

In summation of Point and Non-Point

Based on the facts the correct classification of the stream of water is a Non-Point source as the two CWA descriptions below clearly describe.

(14) The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

Nonpoint source pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification. Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.

Therefore, based on the facts concerning the designation of the NWWP as a Point source is an erroneous designation which can only be supported by the present classification. If correctly classified as an irrigational drain the mixtures of waters entering the Boise River would be a non-point source.

In support of the claim of Indian Creek as a dry intermittent creek bed I have attached observations of the watershed below with a link opened in Google Earth showing the actual conditions of the historic creek.

Current aerial observation of the Indian Creek Drainage via Google Earth from imagery on June 27,2017 following a snow pack that exceeded 140% of normal are as follows: at the head waters of Indian creek SW of I84 IE: 43·28"34.80" N 115·51'01.98W on that date there was no flowing water in the creek bed. Nor was there any observable water in the channel East of I84 or when the creek bed crossed Barker Rd. 16.25 miles WNW. Other than agricultural ponding east of this point the creek is dry. After crossing Eagle road and bisected by the New York Canal at Mora is there a sign of any moisture in the creek bed and that is only sporadic until it is intersected by a canal diversion coming from the New York Canal where it intersects Eagle Rd. south of Kuna Rd. at that point Indian creek has a flow of water which comes not from Indian Creek but from the New York Canal and is the New York Canal until at 43·31"52.70"N 116·28.00"42"W or .18mi. @237.34deg. from the intersection of Ridgewood and W. Columbia Rd. where all the water from the drainage Eastward is diverted into the continuation of the New York Canal. New York Canal Co.s (Tom) on 3/13/2018 reports it is 600 CFS. Obviously, the water in Indian Creek is water from the Boise River either directly or through seepage and is contaminated from

the irrigation, seepage and run off from the agricultural lands. Drainage from these lands into Indian Creek is readily observable using the elevation indicators on the Google site anywhere along the Indian Creek Channel. This contravenes the DEQ's concept of a natural flowing water body and the water quality should be measured by the same standards as the source it comes from; the New York Canal.

See the link to the 6-27-17 aerial photos of the Indian creek drainage.

GoogleEarth_Placemark june 27, 2017.k

Source of Classification

http://www.deq.idaho.gov/media/458228-lower_boise_river_uaa_epa_technical_justification.pdf

IDEQ identifies Indian Creek as:

SW-1 Boise River- Indian Creek to mouth	COLD	PCR
SW-2 Indian Creek - Sugar Ave. (T03N, R02W, Sec. 15) to mouth	COLD	SCR
SW-3a Split between New York Canal and historic creek bed to Sugar Ave. (T03N, R02W, Sec. 15)	COLD SS	SCR
SW-3b Indian Creek Reservoir to split between New York Canal and historic creek bed	COLD	SCR
SW-3c Indian Creek Reservoir	COLD	PCR
SW-3d Indian Creek - source to Indian Creek Reservoir	COLD	SCR

Definitions:
Cold Water. Waters designated for cold water aquatic life are not to vary from the following characteristics due to human activities:
Secondary contact recreation (SCR): water quality appropriate for recreational uses on or about the water and which are not included in the primary contact category. These activities may include fishing, boating, wading, infrequent swimming, and other activities where ingestion of raw water is not likely to occur.
Primary contact recreation (PCR): water quality appropriate for prolonged and intimate contact by humans or for recreational activities when the ingestion of small quantities of water is likely to occur. Such activities include, but are not restricted to, those used for swimming, water skiing, or skin diving.
Salmonid spawning (SS): waters which provide or could provide a habitat for active self-propagating populations of salmonid fishes.

http://www.deq.idaho.gov/media/1117763/triennial-review-issue-paper-man-made-waters-0714.pdf
Rule IDAPA 58.01.02.101.02**. Man-Made Waterways. Unless designated in Sections 110 through 160, man-made waterways are to be protected for the use for which they were developed.**
102. DESIGNATION AND REVISION OF BENEFICIAL USES. When designating or revising beneficial uses for a water body, the Department shall consult with the basin advisory group and the watershed advisory group with the responsibilities for the water body described in Chapter 36, Title 39, Idaho Code. After consultation, the Director shall identify the designated beneficial uses of each water body in these rules pursuant to the rulemaking and public participation provisions of Chapter 52, Title 67, Idaho Code. (3-25-16)

This is the Indian Creek TDML
https://www.deq.idaho.gov/media/60178578/indian-creek-temperature-tmdl-strategy-paper.pdf

II

SECTION 2: T**he downstream effect of the Phosphorous from the Nampa Waste Water Facility**

The Nampa Waste Water Facility contributes approx. 14 CFS of effluent into the water of the drain known as Indian Creek which is recorded to be between 5 to 15 CFS average 7.5 CFS above the NWWP depending upon the irrigation water being discharged into the channel. The confluence with Wilson Creek adds another 32 CFS on average and the confluence with the Riverside Canal combines another 277 CFS for a total of 330.5 CFS. The actual effluent from the NWWP at Caldwell makes up only 2.27% of that water and with an average of 2.34 MG/L of phosphorous the mixing of the effluent with the other waters results in a contribution of .00739 mg per liter. Agricultural runoff is estimated to be the non-point source of 63% of the phosphorous in U.S. Waters and there isn't a method to determine how much of phosphorous is extracted from the effluent contribution when it is applied to the fields. However, I am informed by Andy Bishop director of the Riverside Canal Co. that only 5-8 CFS of the 330.5 CFS enters the Snake River. The rest is consumed by agricultural use and that tests by Idaho Power on the Riverside canal indicate that nearly all of the phosphorous is consumed by the irrigation on the farm lands. This makes any remediation of the effluent not only high miniscule, but questionable. At .29 CFS the discharge contribution to the water from the NWWP is only 8.207 liters per second and as shown above no mg of phosphorous during 7 months of the year. During the winter months (5) the effluent flows into the Boise river.

In summation

As during the seven month irrigation season, the phosphorous from the NWWP is consumed before entering U.S. Water, the requirements on Nampa should be reduced to 41% of the remediation. Phosphorous in surface water should be curtailed. However, as the high phosphorous content is beneficial to plant growth and welcomed by the users removing it from water being used for agriculture is highly questionable. Without the high content phosphorous the farmers will supplement the loss with more phosphorous. This in turn without control of agricultural runoff which unlike the Riverside Canal district is controlled by only a few of the irrigation districts and is recorded to contribute 63% of the phosphorous in U.S. Waters. It is unjust to require stringent remediation of the phosphorous by the cities to offset the damage caused by unregulated agriculture. As it is economically infeasible and questionable to remediate phosphorous, Nampa should only be required to finish phase I of the waste water expansion.

III

a. Applicable SCOTUS decisions.

In the recent past there have been two Certiorari appeal SCOTUS decisions which have clarified and confused defining waters from artificial irrigation.

The first is the Rapanos decision 2003. "In April 1989, petitioner John A. Rapanos backfilled wetlands on a parcel of land in Michigan that he owned and sought to develop. This parcel included 54 acres of land with sometimes-saturated soil conditions. The nearest body of navigable water was 11 to 20 miles away. 339 F. 3d 447, 449 (CA6 2003) *(Rapanos I)*. Regulators had informed Mr. Rapanos that his saturated fields were "waters of the United States," 33 U. S. C. §1362(7), that could not be filled without a permit. Twelve years of criminal and civil litigation ensued.

JUSTICE SCALIA, joined by THE CHIEF JUSTICE, JUSTICE THOMAS, and JUSTICE ALITO, concluded: 1. The phrase "the waters of the United States" includes only those relatively permanent, standing or continuously flowing bodies of water "forming geographic features" that are described in ordinary parlance as "streams," "oceans, rivers, [and] lakes," Webster's New International Dictionary 2882 (2d ed.), and does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall. The Corps' expansive interpretation of that phrase is thus not "based on a permissible construction of the statute."

Justice Kennedy wrote a separate opinion which the courts have relied upon thereafter. Wherein he concluded that any water that has a significant "Nexis" to navigable waters of the U.S. are U.S. waters which includes tributaries and as such would include Indian Creek.

The second SCOTUS case is Vierstra vs U.S.

BACKGROUND

Defendant, Mike Vierstra ("Vierstra") is charged with three counts of negligently discharging a pollutant from a point source into the waters of the United States without a permit in violation of 33 U.S.C. §§ 1311(a) and 1319(c)(1)(A). *Superseding Information* (Dkt. 7). The Superseding Information alleges that on or about March 25, June 1, and November 4, 2009, Defendant negligently discharged process wastewater from a concentrated animal feeding operation ("CAFO"), into Low Line Canal, a water of the United States, without a permit for the discharge. *Id.*

Defendant argues that the Superseding Information must be dismissed for lack of jurisdiction, because: (1) the Low Line Canal is not part of the "waters of the United States" and (2) the March and November discharges were into the dry bed of Low Line Canal and there is no evidence that the pollutants were carried downstream. However, as explained more fully below, the Government's allegations, if proven, support a finding that the Low Line Canal is a non-navigable tributary eventually discharging water into a navigable water of the United States. In addition, the Low Line Canal is part of a continuous channel with a distinct, open, and direct surface water connection to and from navigable waters for six to eight months out of the year. Accordingly, even though the canal is man-made, lacks an interstate connection, and the flow is seasonal, the Court finds that the Government has made a preliminary showing in support of

jurisdiction. The Government's allegations, if proven, support a finding that the Low Line Canal constitutes "waters of the United States" subject to federal Clean Water Act ("CWA").

ANALYSIS

The Low Line Canal constitutes "waters of the United States." Accordingly, federal CWA jurisdiction attaches, whether the channel is carrying water or dry. This is true, even though, in certain situations, the Low Line Canal might also be deemed a point source.

[803 F.Supp.2d 1168]

A. The Low Line Canal Constitutes Waters of the United States

The Government's allegations reflect that the Low Line Canal meets the statutory and regulatory definition of "waters of the United States" as a tributary connected to a navigable waterway. Because water flows through its channel seasonally and continuously for a six to eight month irrigation season each year, it meets both the "relatively permanent" and "significant nexus" standards set forth in the plurality and concurrent decisions set forth in *Rapanos v. United States,* 547 U.S. 715, 126 S.Ct. 2208, 165 L.Ed.2d 159 (2006).

In summation

The conclusion of both of these cases are that Indian Creek is U.S. Water, but the U.S. Corps of Engineers and the EPA established a NEW RULE in 2015.

d. The CWA rules applicable to Indian Creek

The U.S. Corps of Engineers and EPAs 2015 new rule “Definitions” which will take place with full enforcement on 2-6-2020 states the following: (4)(i) being the most applicable.

(b) The following are not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(4) through (8) of this section.

(1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

(3) The following ditches:

(i) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

(ii) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

(iii) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1) through (3) of this section.

(4) The following features:

(i) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(ii) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;

(iii) Artificial reflecting pools or swimming pools created in dry land;

(iv) Small ornamental waters created in dry land;

(v) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(vi) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(vii) Puddles.

(5) Groundwater, including groundwater drained through subsurface drainage systems.

(6) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(7) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

https://www.ecfr.gov/cgi-bin/text-idx?SID=47f4c0a2514b3074958e5479d8c5ecc4&mc=true&node=pt33.3.328&rgn=div5#se33.3.328_11

In Summation

Qualifying statement: my opinions are not to be construed as legal opinions as I am not licensed nor qualified to be an attorney.

The New Rule is now effective in planning and will be the rule on 2-6-2020. The above definitions are somewhat vague with 4(i) the most applicable to identify Indian Creek from being U.S. Water. The closing argument as unquestionably, “If irrigation ceased on the south bench of the Boise river all the “Creeks” would cease to exist”. 3(ii) is also supportive of removing the Indian Creek water shed from being regulated as Indian Creek does not drain a wet land area but drains only irrigation. In my opinion a challenge to the CWA for removing Indian Creek from regulated U. S. Water is somewhat questionable.

e. The Idaho statutes and responsibility of the Director of the IDEQ to review and correct water mis-classifications.

Under Title 39-3607 IC the Director is required to review water classifications IE: Designated uses shall be reviewed and revised when such physical, geological, hydrological, atmospheric, chemical or biological measures indicate the need to do so. The director shall consider the economic costs required to attain a revised beneficial use. A designated use, that is not an existing use, shall be removed when it is demonstrated that attaining the use is not feasible, using those factors set forth in 40 CFR 131.10. for clarity I have copied and pasted those applicable section of Title 39.

39-3604. DESIGNATION OF INSTREAM BENEFICIAL USES. (1) The director shall designate the beneficial uses each surface water body can reasonably be expected to attain.

(2) Designated beneficial uses shall reflect existing uses. The director shall designate beneficial uses without regard to whether the uses are currently being attained or whether the uses are fully supported at the time of designation. In designating beneficial uses, the director shall consider:

(a) The existing uses of the water body;

(b) The physical, geological, hydrological, atmospheric, chemical and biological measures that affect the water body;

(c) The beneficial use attainability measures identified in section 39-3607, Idaho Code; and

(d) The economic impact of the designation and the economic costs required to fully support the beneficial uses.

(3) When designating beneficial uses for a water body, the director shall consult with the basin advisory group and the watershed advisory group with the responsibilities described in this chapter for the water body. After consultation, the director shall identify the designated beneficial uses of each water body in the rules of the department pursuant to the rulemaking and public participation provisions of chapter 52, title 67, Idaho Code.

(4) Persons who either conduct nonpoint activities or who conduct operations on waters described in section 39-3609, Idaho Code, pursuant to a national pollution discharge elimination system permit, shall not be required to meet water quality criteria other than those necessary for the full support of a water body's existing and designated beneficial uses, except as provided in section 39-3611, Idaho Code.

39-3607. REVISIONS AND ATTAINABILITY OF BENEFICIAL USES. The director shall, in consultation with the appropriate basin advisory group and watershed advisory group, conduct a beneficial use attainability assessment to determine whether beneficial uses should be revised. Designated uses shall be reviewed and revised when such physical, geological, hydrological, atmospheric, chemical or biological measures indicate the need to do so. The director shall consider the economic costs required to attain a revised beneficial use. A designated use, that is not an existing use, shall be removed

when it is demonstrated that attaining the use is not feasible, using those factors set forth in 40 CFR 131.10(g).

Previous assessments of beneficial use attainability that are of a quality and content acceptable to the director shall constitute the baseline data against which future assessments shall be made to determine changes in the water body and what beneficial uses can be attained in it. In addition, the director, to the extent possible, may determine whether changes in the condition of the water body are the result of past or ongoing point or nonpoint source activities. The director shall also seek information from appropriate public agencies regarding land uses, water uses and geological or other information for the watershed that may affect water quality and the ability of the water body in question to attain designated beneficial uses. In carrying out the provisions of this section, the director may contract with private enterprises or public agencies to provide the desired data.

History:

39-3611. DEVELOPMENT AND IMPLEMENTATION OF TOTAL MAXIMUM DAILY LOAD OR EQUIVALENT PROCESSES. (1) For water bodies described in section 39-3609, Idaho Code, the director shall, in accordance with the priorities set forth in section 39-3610, Idaho Code, and in accordance with sections 39-3614 through 39-3616, Idaho Code, and as required by the federal clean water act, prepare a subbasin assessment and develop a total maximum daily load to allocate pollutant loads to point source and nonpoint sources that discharge pollutants to the water body.

(2) Upon the completion of a total maximum daily load, the director shall publish notice of the final decision on the TMDL in the Idaho administrative bulletin and provide written notice to members of the applicable watershed advisory group. The director's final decision shall be based upon a record that provides the basis for the total maximum daily load. The rulemaking provisions in sections 67-5220 through 67-5231, Idaho Code, shall not apply to TMDLs. The director's final decision regarding a TMDL may be appealed to the board of environmental quality in accordance with section 39-107(5), Idaho Code, and the rules governing such appeals. The time for appeal to the board shall commence upon publication in the administrative bulletin. The board's final decision is subject to judicial review under section 39-107(6), Idaho Code. The provisions of this subsection shall apply to all total maximum daily loads developed by the director after January 1, 1995. Provided however, that the rulemaking provisions in sections 67-5220 through 67-5231, Idaho Code, shall apply to TMDLs for metals in the Coeur d'Alene River Basin, upstream from the head of the Spokane River. Provided further, that nothing herein shall modify the requirement that water quality standards be promulgated as rules of the department pursuant to title 67, chapter 52, Idaho Code.

In Summation

The above clearly indicates that the Director can and should review the classification of Indian Creek. A request for reconsideration should be made by Nampa and if refused appealed to the Board of Environmental Quality and if then rejected require Judicial Review as allowed within 39-107(5).

Final comments

Prime consideration for the City of Nampa would be to agree to have the Riverside Canal District take all of the water from the Indian Creek flow year around which they have agreed to do and eliminate the requirements of the EPA and IDEQ

The Indian Creek 2016 TDML appears to be a political paper as it was obviously assembled without consideration of the true nature of the hydrology, the history or the feasibility to attain the chemical, physical, biological conditions express therein. Clearly identified in the studies and history are the infeasibility of attainment and the extraordinary cost placed upon the citizens of Nampa wherein the final remediation will be miniscule.

Municipalities should in good conscience attempt to curtail pollutants from entering into and degrading the surface waters of the U.S., however with present methodology pollutants will enter those waters. Which brings to a point, how can Nampa and Idaho assist in reducing pollutants.

There also appears to be a conflict between Idaho law, the EPA and the IDEQ. The EPA and IDEQ have assumed jurisdiction over ditches and canals even if those ditches and canals are intermittent. Idaho water law within title 39 is in conflict with both the EPA and the IDEQ wherein the law prohibits regulation of the agricultural ditches and canals.

During this research and the past year and a half some ideas have evolved during my conversations. The first came from Hubert Osborne wherein he remarked that in California those industries and agricultural operations using surface irrigation were required to retain any excess irrigation water within the property where it was utilized, by ponding and reusing the runoff by pumping it for reuse on the same property. This of course would be a state issue.

The second which I am sure Nampa is now considering, is simple reuse of effluent for the pressure irrigation system Nampa now requires for all new subdivisions which should also be utilized on our golf courses public and private.

Citations not listed above

https://www.epa.gov/laws-regulations/history-clean-water-act

http://www.deq.idaho.gov/media/60179654/idaho-2014-integrated-report.pdf