

Staff Report

TO: Board of Directors

FROM: Jennifer Hanson, General Manager

DATE: August 23, 2022

SUBJECT: PFW Workshop – Public SWOT Presentations

ADMINISTRATION

RECOMMENDATION:

Receive presentation(s) from members of the public regarding their Strength, Weakness, Opportunity and Threat (SWOT) analysis of NID.

BACKGROUND:

NID is continuing the Plan for Water (PFW) process, which includes a comprehensive review of available water supply and the long-term impact on varying water demands. Once complete, it is anticipated the PFW will consist of a suite of possible supply and demand management strategies to address a range of future conditions to ensure reliable water supplies.

In preparation for the Strategic Planning portion of the Plan for Water, staff requested of over 30 community/regional organizations and individuals to complete a SWOT analysis of NID. A SWOT of NID, conducted by members of the community, can serve as a guide to build on what the District does well, address what it is lacking, present opportunities to seize new openings, and minimize risks. This public analysis of NID is intended to be helpful in developing NID's updated strategic plan.

On August 4, the SWOT was sent to twenty organizations/individuals and on August 8 it was sent to an additional twelve. Those who completed the analysis have been given the opportunity to present their analysis at this meeting. As of August 18, staff received two SWOT analysis in response.

The success of the PFW will be largely dependent on stakeholder involvement. This is an open forum workshop, and public engagement is encouraged.

BUDGETARY IMPACT:

None at this time

Attachments: (1)

- Presentation of SWOT from members of the public

SWOT ANALYSIS



Nevada Irrigation District



NID STRENGTHS



NID WEAKNESSES

SWOT ANALYSIS



Nevada Irrigation District



NID OPPORTUNITIES



NID THREATS

NAME/ORGANIZATION:

SWOT ANALYSIS



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NID THREATS

NAME/ORGANIZATION:

NID SWOT

NID invited Friends of Bear River to participate in its strategic plan process, first by being present, and also by providing this stakeholder groups' brainstorm of NID's strategic plan element called the SWOT analysis, or Internal Strengths and Weaknesses, and External Opportunities and Threat. This half hour brainstorm was conducted by Zoom on Monday Aug 15, and included lists brought from previous individual efforts. The group included 9 participants, counting outside conversations. All participants were residents of the Bear River Watershed except one Placer County resident, and two were NID customers. Collectively, the nine participants represent over four hundred years of local residency. This list is submitted by Otis Wollan on behalf of the participants.

NOTE ON SWOT PROCESS:

From my career experience as a facilitator, this level of collecting and combining various stakeholder SWOT lists is not an analysis. It is simply a list. Additional steps are needed to make the lists meaningful.

An initial stage is to have the stakeholders prioritize their own lists, answering the question: which are the salient elements in each category from the perspective of that separate stakeholder brainstormed list. Having done this many times at in-person strategic planning sessions, a method often used is using sticky dot prioritization. This is often referred to as k/3, which is giving individuals $\frac{1}{3}$ the number of dots than the number of items in each category. Dots may or may not be used for additional emphasis (i.e. if there are 30 items, individuals get 10 dots, and must use them on a minimum of 7 items for example, which allows them to put 2 or 3 dots on an item where they feel a particularly strong emphasis). Rating systems can also be used, i.e. providing participants with rating cards (e.g. 1 through 5) and rating much as done for Olympic performances--- the facilitator is the "instant average assessor" in this exercise. Both these examples are used as part of in-person processes. It is not time consuming in person; it may be cumbersome in online processes.

The important point is that when the lists are prioritized, it is not just the listed content but also the prioritization that reveals the values of that stakeholder group. As an example, the prioritization of the NID governing Board and the NID staff will inevitably be quite different. That is the source of dialogue and deeper analysis. Similarly, the lists and priorities of NID customers, and stakeholder groups like Friends of Bear River will likewise be quite different from either Board or Staff. Going into this level of SWOT analysis provides deeper understanding of various perspectives, and reveals rationale for informing decision-making.

Our recommendation is that NID in this strategic planning stage undertake a sophisticated approach to SWOT analysis, and not simply retain the current contributions as a single combined list.

Internal Strengths

- 100 years of consistent operation as utility
- Outreach to community stakeholders
- Improved receptivity to suggestions from non-preferred stakeholders
- Openness to local indigenous people
- Greater focus on stream function and functional flows
- More women in leadership roles
- Increased diversity in the workforce
- Open and accessible board
- Board that is willing to be engaged in details
- Willingness to “clean house” and evolve , e.g. “retired” a chief engineer, a general manager, a CFO
- Communications and transparency greatly improved
- Growing, albeit in fits and starts, e.g. Plan for Water
- Good track record in fundraising with grants from state and fed
- Have not had a dam failure
- Some good ecosystem projects like meadow restoration
- Evolving from irrigation district to full service water district, serving municipal water
- Adding staff that are trained in conservation, biology, and environmental concerns
- Skillful in remote access, e.g. Zoom
- Improved use of technology
- Haven’t gone bankrupt in 100 years of service
- Abundant water supply, with huge system of reservoirs at ideal high elevation locations
- Extensive and secure water rights

Internal Weaknesses

- Assumptions
 - Unmet needs in agriculture without documentation
 - That raw water use is “ag” use, not rural suburban use
 - Water supply will be limited by climate change
 - That present water supply is not adequate for future needs
 - That the objective for the Plan for Water was (and is?) to determine a project that will exercise the Centennial state-filed water right (fungible water right?)
- Apparent resistance to gathering data on water use, raw water in particular
- Don’t take active steps to learn about present uses, whether beneficial or not
- 100 year history of top down management and authoritarian culture
- Exemplify leadership of a “good old boy network”
- Don’t have an appreciation of State or Federal government organizations
- Don’t operate under concept of a local government chartered by the State government
- View regulatory authorities as intrusive and obstructive
- View water rights as “private property” rather than state “licensed” water right
- For decades, referred internally to themselves as “the Company”, operate with private sector paradigm and not as local public agency

- Terrible history of bad behavior to those who disagree with NID practices and policies
- Terrible history of bad behavior toward those who are not direct NID customers but are profoundly affected by NID operations
- Past history of arrogant and ignorant statements by NID engineers
- Appearance of “ganging up” on a board member that represents a large number of people
- Preferential to agriculture to the point of lopsided cost of service rates for treated water customers
- Too many custom and confusing water rates that favor long time customers, including a \$12/acre foot rate for a sitting board member
- Disparity between charges to mutual water companies and private conveyance accounts
- Property purchases in Bear River made under threat of eminent domain expressed by previous general manager in closed meeting with property owners
- Grand jury revelations about CA code and Brown Act violations
- Higher rates for GV and Nevada City residents who cannot vote in NID elections
- Gross misogyny demonstrated publicly to a board member for over a decade by other board members and by management team
- Weakness in financial management, e.g. decades late transition to financial software allowing accrual accounting
- Unclear financial reports on operations, and on reserves
- Lack of clear financial policies, e.g. policy on the use of borrowing power
- Lack of clear information on borrowing capacity; naive approach to debt
- Incomplete and misleading financial forecasts, e.g. protecting Parker Dam costs without including interest cost estimates
- Inability to measure water delivery at the “farmgate”
- Inability to verify whether water use behind “farmgate” is being used beneficially, or is wasted
- Inability to quantify and distinguish between tailwater loss, canal leakage, evaporation, theft, etc (from NID UWMP)
- Huge accumulation of water rights, far in excess of water delivered and used
- Extensive deferred maintenance
- Huge network of canals needing repair, efficiency analysis, etc.
- Reliance on herbicides for canal maintenance
- Lack of data on water quality and impacts of herbicide use for canal maintenance
- Board withdrawal from groundwater collaboration group leaves no voice in that forum regarding future benefits or threats to NID district residents

External Opportunities

- More collaboration with PCWA and JPA for collaborative future
- Get good public input for NID strategic plan, happening right now
- Acquire Bear Canal, and rethink reliable water supply for Placer County & S. Nevada County
- Define regional long term future to clarify what is happening in the future

- Engage collaboratively and regionally in groundwater management for N Am subbasin
- Working with community interest groups like SSI, Mine Watch, SYRCL
- More creative partnership with PG&E PCWA and SYRCL
- Acquisition of the Drum-Spaulding system and re-thinking that system
- Groundwater storage in cobbles along rivers for riverine restoration
- Bear Valley restoration
- Investigate and promote on farm storage
- Work with natural infrastructure like eliminating Bear Canal and using river channel conveyance to tunneled gravity flow to Pacer County
- Explore and promote river access for low impact recreation
- Explore fuel reduction strategies for Bear River watershed
- Embrace change and environmental stewardship like functional flows and habitat restoration
- Rel-evaluate Combie Reservoir “privatization” and restore public access to this public resource
- Learn from PCWA and YCWA in their watershed programs, climate change planning, etc
- Explore remedies and remediation for past injustices of genocide and of the gold rush evolution to irrigation uses from hydraulic mining which left a legacy of injustice
- Change culture of the institution from 19th century irrigation district to modern multi-resource management agency
- Start meetings with a land acknowledgment, modeled on native tribal practices'
- Create at least one mural in board room representing native peoples of this area
- Embrace the changes that climate change will bring, and adopt adaptive strategies like fuel reduction, species refugia, transform watershed landscape from resource extraction abuse of last two centuries to sustainable, fire balanced ecosystem management
- Enhance recreational access with trails, public access points, sanitation facilities, etc
- Enhance recreational boating through flow management acknowledging that use amid suite of uses
- Explore salmon restoration
- Partner with raw water customers to conserve water and use water efficiently for beneficial uses
- Investigate the Nisenan right to water declaration, collaborate for mutual interests
- Remove/change Gold Hill on Auburn Ravine for further salmon restoration
- Investigate salmon restoration on other western Placer streams
- Partner with urban water customers to robustly implement conservation BMP's like most other agencies that were part of the Urban Water Conservation Council (NID never joined that early effort)
- Investigate fractured rock groundwater patterns and uses to partner where possible to sustain fractured rock groundwater availability and use--- includes raw water conveyance influences through use and leakage
- Partnering with Bear Yuba Land Trust for trails and conservation easements
- Investigate community electrical distributed electrical systems, and regional self-sufficiency

- Work with State for positive partnership for parks and ecosystem restoration and management
- Expand monitoring programs for water quality and ecosystem data and information, recreation, invasive species, fire flow
- Investigate interpretive opportunities for history both of native american and European settlement history in the context of natural history

External Threats

- Crumbling infrastructure and deferred maintenance
- Fire threat and inevitability of burnover in this nearly universally fuel loaded and mismanaged forest ecosystem
- Decimation of NID customer base and infrastructure from fire (e.g Paradise)
- Bankruptcy
- Choosing lemon instead of lemonade
- Looking backward instead of forward
- Blinded by cultural biases of engineering based 19th century irrigation district paradigm
- Focus on scarcity
- Discounting and diminishing value of natural environment
- Thinking that NID “owns” the water, rather than State ownership with rights granted for beneficial stewardship of those rights
- Selling water out of district for profit
- Over reliance on legal defense and legal protections rather than pursuing change and new paradigms
- Perceiving the natural worlds needs as a threat to irrigation delivery instead of an honor to sustain the living earth that benefits humans and all living things
- Overlooking that everyone matters
- Dangerous water diversions and uses by gold mines

SWOT ANALYSIS



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NID OPPORTUNITIES



NID THREATS

NAME/ORGANIZATION:

NID SWOT

Submitted jointly by: Foothills Water Network & South Yuba River Citizens League (SYRCL)

STRENGTHS (internal)

- Water Reliability– NID receives water from what is a water-rich region of the state, providing secure sources for the community
- Extensive canal distribution system (also a weakness, see below)
- Senior water rights
- System sources from a headwaters region
 - Secure source
 - Excellent water quality
- Engaged community; NID generally has the community's attention and need to use it wisely
- Generally strong customer service
- Yuba-Bear hydropower license
 - Favorable PPA with PGE
 - Certainty of having a newly negotiated FERC license (once implemented)
- Good start on restoration & environmental programs, creating replicable models
 - Forest health/fire prevention at Scott's Flat
 - Meadow restoration efforts
 - Mercury removal efforts
- Strong track record of grant funding for Combie and meadow restoration
- Important community contributor and employer

STRENGTHS (external)

- Community Resources available (ability to draw on experts from other agencies/orgs)
- Good recreation facilities including extensive canal system for public trails

THREATS (external)

- Climate change impacts to water availability (increased boom/bust cycles)
 - Changing to more rain than snow
 - Water arriving in fewer, larger storms
 - Prolonged drought potential beyond what storage can solve
 - Past data/trends don't apply anymore; all bets are off
 - Less predictability

- System security
 - Vulnerable infrastructure
 - Cyber security
 - Water theft
- Increased wildfire risk and impacts to delivery infrastructure and delivery and integrity of watershed health and yield
- Water quality, ex. Tire Wear Particles, especially 6PPD^{1,2}, salts, heavy metals, potential mine spills, wildfire watershed impacts

WEAKNESSES (internal)

- Aging wood and earth canal system—fire vulnerability, leakage, catastrophic failure, clogged farm gates, blown out ditches, etc.
- Inability to determine actual onsite raw water usage
- Need to differentiate usage within raw water; state limits recognition to raw and treated water only. Need additional breakdown within raw categories
- No water usage meters at farm gates
- Herbicide/pesticide use in canals
 - Notification system
 - Impact to organic crop value
- Grand jury investigation and negative results
- Financial insecurity/challenges
- Reliance on contractors/consultants for core work
- Inherited history of negative community perception and financial mismanagement

OPPORTUNITIES

- Embrace indigenous resource management concepts (incorporate TEK)
- Improve canal safety and integrity
- Encase (some) canals for evaporation management
- More/improved recreation facilities – accessibility
- Gather more, and more accurate, data on water use – could improve data collection systems
- Install water usage meters at farm gates
- Utilize science to make better decisions regarding storage opportunities

¹ <https://www.washington.edu/news/2020/12/03/tire-related-chemical-largely-responsible-for-adult-coho-salmon-deaths-in-urban-streams/>

² <https://pubs.acs.org/doi/10.1021/acs.estlett.1c00682>

- Education/rebates/outreach/requirements for water conservation measures, including agriculture. Pursue grant funding for rebate programs, domestic and agricultural conservation incentives
- Pursue forward-looking means of water distribution, such as distributed storage strategies
- Real estate inventory available for revenue generation through sales
- Bear River park
- Embrace salmon as added value in upper watershed
 - Pursue collaboration with environmental groups
- Groundwater—reengage and take a leadership role, embracing West Placer groundwater injection and storage
- Implement Hemphill fish passage improvements
- Engage community to be a climate change leader in California for 21st century water management
- Ability to create and utilize flexible resource management tools; managerial adaptability to less predictable future conditions
- Continue improving transparency, communications, and outreach
- Continue to foster an engaged, accessible, and knowledge-seeking Board of Directors