



## Yosemite West Property & Homeowners, Inc.

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### Notes from Yosemite West District Advisory Committee (YWDAC) Meeting

July 9, 2020 (by teleconference)

Guest presenter:

Rod McNealy - Provost&Pritchard, Civil Engineer, Registered Professional Engineer

YWDAC members present:

Tom Lambert (chair)

Debra Kroon

Malcolm Neal

John Mock

Art Cormier

YWDAC members absent:

Jeff Webb

Neal Misener

Ex-Officio Member:

Rosemarie Smallcombe (Mariposa County, District 1 Supervisor)

Mariposa County agency/organization representatives present:

Mike Healy (Public Works, Director)

Jean Dordan (Public Works, executive assistant)

Other agency/organization representatives present:

Joe Meyer (Yosemite National Park, YNP, Chief-of-Staff)

Michael Pieper (National Park Service, NPS)

Kristina Rylands (NatureBridge National Environmental Science Center, NESCC)

Ted Williams (Yosemite West Property and Homeowners Inc., YWPHI)

Jerry Edelbrock (Yosemite Conservancy)

Community owners:

Larry Anstead

Bert Kroon

Jeff Hornacek

Rod McNealy was asked to present a verbal summary of the Provost & Pritchard Engineering report dated 6/8/2020 and posted at [http://yosemitewest.org/ywdac/NESC\\_Water\\_Provost\\_Pritchard\\_Engineering\\_Report\\_2020-0608.pdf](http://yosemitewest.org/ywdac/NESC_Water_Provost_Pritchard_Engineering_Report_2020-0608.pdf) that was received by the YWDAC on 6/10/2020.

- Provost&Pritchard was contracted to study for NESC a proposal to connect to YWMD for “metered water service”, **not a consolidated water system**.
- NPS would “disconnect” the Chinquapin water system from NESC and segregate the main line in the Wawona road, so the water loop around NESC campus would be isolated from Chinquapin’s other users.
- Communications with the state Department of Water Resources (DWR) started in Sept 2019, with idea of potential application to YWMD for water service. The Chinquapin water system had never been under an operational permit from DWR, and so had not previously triggered the SB1263 requirement to consider consolidation with neighbors.
- Provost & Pritchard views the jurisdictional issues (between NPS and Mariposa County) as an insurmountable obstacle to any true consolidation or sharing of tanks.
- Interconnection of tanks (for flow needed during pump outages or fire-suppression) would require a 5” line, but bi-directional flow could cause undesirable “pipe scouring” which would decrease water quality. Provost&Pritchard can’t foresee how NPS could ever give a perpetual easement to County to use or maintain federal assets. Interconnection just doesn’t align.
- Metered service from YWMD for NESC would just be a 2” line tap-off near the Henness Circle tanks, and the responsibility for transport (booster system, and new unidirectional pipeline between tanks) would be NPS responsibility and not County responsibility.
- **Despite previous statements from the YNP superintendent, Provost&Pritchard believes the only benefit to existing YW owners of adding NESC as an YWMD customer is the additional cash income from metered water purchase. Without any sharing of infrastructure, there is no other benefit to the Yosemite West community, and in particular, the tanks of NESC would not help mitigate buildout growth in Yosemite West.** While true that fire-trucks could access the NESC tanked water for use in Yosemite West fire-suppression (as indeed happened in the 2018 Ferguson fire), fire fighters always have access to any tanked water, regardless of source.
- The existing YWMD system is a series of pressure zones fed from the 347000gallon dual interconnected tanks. The Henness circle home area has a pressurization device, and rest of YW is serviced by gravity feed with pressure reducers.
- The well #9 is in fantastic condition, and still delivers volume consistent with the 1984 pump tests. Provost&Pritchard did not evaluate the condition of the current YWMD distribution piping system.
- Claimed NESC usage of 20gpd per capita was debated, and there were some minor calculation discrepancies. Peer reports suggest similar facilities to NESC typically use closer to 32gpd per capita, and possibly 50gpd per capita.
- Even though the peer reports suggest demand could be up to 12000gpd, only the estimated NESC demand of 7500gpd total could was used by Provost&Pritchard.
- There are several estimates for the rate of building houses in YW. The DWR letter quoted 4 houses per year, Public Works estimates 5 houses per year (from building permits over last 6 years), and a broader look at the last 15 years suggests higher, such as 8 houses per year. The number of years before build-out consumes available water capacity thus can vary from 22 years down to potentially only about 10 years.

- The existing Provost&Pritchard report is inconsistent in its use of water use based on “average”, “maximum month”, “maximum day”, and “maximum day demand \* 1.5”. **Provost&Pritchard agrees that the water laws (such as CA section 64554) state that water system capacity should be judged by the MDD (Maximum Day Demand \* 1.5) method, and yet Provost&Pritchard still draws its conclusions in this report by referring to the volumes without the 1.5x factors.**
- By the code-prescribed MDD method, the YW full-buildout without NESC requires 133000gpd or 92gpm, which shows over-subscription to the current 85gpm capacity of well #9.
- Without the code-prescribed 1.5x factor, or looking only at current usage (not YW full-buildout), Provost&Pritchard judges there is enough capacity to support adding NESC usage.
- There was discussion on what happens if NESC exceeds its claimed capacity. Kristina Rylands stated that NESC would “welcome” a mandatory cap that would cutoff their supply if NESC exceeded the agreed water allocation. NatureBridge’s agreement with NPS for the Crane Flat campus was stated to already include a usage cap.
- Supervisor Smallcombe agreed there could and should be provisions in any contract that would include clauses for mitigation or de-escalation if NESC exceeded agreed capacity, or more generally if YWMD pumping capacity could not supply all connected users.
- The Provost&Pritchard report incorrectly states that building permits in the YW subdivision could be gated by wastewater capacity, but the agreement for the YW WWTF (wastewater treatment facility) already states that permits are not denied due to capacity. Rather, if WWTF usage exceeds WWTF capacity, then the definition of an EDU is changed to “ration” the available WWTF capacity. Director Healy agreed that the discussion of WWTF capacity should be deleted from the Provost&Pritchard report.
- Despite all the issues raised in this discussion, the question is still whether the YWDAC “accepts” the Provost&Pritchard report. The conclusion was that the YWDAC would make a list of corrections needed (delegated to Tom, John, and Malcolm), and that Provost&Pritchard would make a revision before the YWDAC could accept the report.
- A pre-fetched agenda item for the Mariposa BoS to accept the Provost&Pritchard report had been placed on the agenda for the 7/14/2020 BoS meeting, but this item has now been deleted since the report has many problems/errors and was not accepted.
- The “big items” to fix in the Provost&Pritchard report include:
  1. Strip the incorrect statements relating to DWR and YWMD believing there was a “second-well” agreement for YW with “a neighbor” back in 2013.
  2. Strip the incorrect statements about building permits being limited by wastewater capacity.
  3. Make all quantity calculations consistent with the MDD method (Maximum Day Demand \* 1.5).
  4. Correct errors regarding assumptions about NESC consumption.
- In addition, the YWDAC suggests a second parallel report is needed covering broader issues:
  1. If NESC is allowed access to YWMD water, NESC agrees to include a contractual cap.
  2. Contract issues dealing with what happens if/when YWMD runs out of water, and whether there is an order of de-connection.
  3. Approval process needed for any YWMD customer expansion, such as a vote of the existing YWMD property owners.

# Appendix

The Provost & Pritchard Engineering report dated 6/8/2020 and posted at [http://yosemitewest.org/ywdac/NESC Water Provost Pritchard Engineering Report 2020-0608.pdf](http://yosemitewest.org/ywdac/NESC_Water_Provost_Pritchard_Engineering_Report_2020-0608.pdf) was received by the YWDAC on 6/10/2020.

Questions were pre-submitted prior to the 7/9/2020 meeting.

Some questions were submitted and posted at: [http://yosemitewest.org/ywdac/JM\\_questions P&P\\_report.pdf](http://yosemitewest.org/ywdac/JM_questions_P&P_report.pdf) and also the list below:

- The report quotes letters written by (now departed) State Water Board employee Kassy Chauhan from 9/9/2019 and 9/19/2019. Why does Provost & Pritchard repeat the errors of those letters?
  - Page 2-5 states the County mitigated the concern about a single source of water (no second well) by making an agreement with “a neighbor” for an emergency water connection. This is just a mis-statement, because no one can identify there ever really was an agreement, or who the “neighbor” was, or what neighbor’s source could possibly be sufficient. *Why does Provost & Pritchard believe this mis-statement?* The statement of “acceptable second-source agreement” should be stripped, as it is just not true, and YW is still in need of a second source.
  - Page 2-5 repeats a claim that there are only 4 homes built (additional water connections) per year. But the pace of building has accelerated, and even now there are a dozen houses in development. The claim that there are 24 years until YW runs out of water is false. A more reasonable estimate is that YW will hit maximum capacity in 10 years, without any additional sources, and without any new customers (NESC, YC) outside of the current subdivision. *Why does Provost & Pritchard repeat the 24 year number without checking the real current houses/year development rate?*
- Existing standby customers of YWMD are already paying fees. If these customers are taken into account, the “committed” flow for MDD need is 92gpm (stated on page 2-5), already exceeding the 85gpm capacity.
  - *How can Provost&Pritchard conclude (in finding 3 on page 4-1) that there is sufficient capacity for accepting additional customers when the current commitments already exceed capacity?*
- The report repeats a claim that NESC usage would only be only 20gpd per capita. But that number relies on unchallenged optimistic input, and is a very low estimate when future usage includes the buildout for a full commercial kitchen, dining hall, restrooms and bathhouses.
  - *Why does Provost&Pritchard not use the estimated water usage projection for NESC based on similar “boarding camp” properties with children and staff, instead of just believing NatureBridge’s optimistic projected claim?*
  - The peer report suggests 33gpd per capita is a more likely estimate, but the consumption could also range up to 50gpd per capita.
  - If the real NESC consumption were 50gpd per capita, and the total demand from NESC

were really > 10,000gpd in peak months, then this could be a significant growth to current YW usage, or equivalent to adding on the order of 50 houses.

- Page 3-1 (and repeated in finding 5 on page 4-1) makes the statement that the public works director is primarily concerned about the wastewater capacity limit of 60000gpd for considering issuance of new building permits. But the YW wastewater treatment facility (WWTF) agreement specifically states that building permits cannot be denied due to WWTF capacity, but rather that the definition of an allowed EDU would just be redefined to share the WWTF capacity across all customers.  
*Why does Provost&Pritchard discuss the WWTF limit at all, since it cannot affect building permit issuance or water capacity issues?*
- The report cites the DDW report stating that in a maximum demand month there could be 1,535,000 gallons per month, equivalent to 51,167 gpd. And previous statements from public works also stated the current buildout had maximum demand of 51,000 gpd to 65,000 gpd. For full subdivision buildout, the 51,167 gpd grows to a projected 86,000gpd, which when using a 1.5x MDD peaking factor requires 90gpm (consistent with the DDW calculation of 92gpm for full subdivision buildout).
  - Then in section 3.2.1.1 on page 3-4, the Provost&Pritchard report quotes only 47,000gpd (= 33 gpm) as the need, and concluded sufficient capacity for expansion.
  - *Why did the report not maintain consistency to the 51,167gpd value previously stated?*
  - *Why did the report not include the 1.5x MDD peaking factor in section 3.2?*
  - *Why did the report not include the planning for subdivision buildout needs in section 3.2?*
- Section 3.2.2.2 on page 3-10 discusses the problem that the County would likely never get the rights from the NPS for perpetual maintenance of any interconnecting pipeline. *Why are the NESC tanks considered any benefit to YW homeowners if the YWWSA would not have rights perpetual rights to benefit from increased storage capacity and a bi-directional pipeline?* The storage capacity could be essential if for example there was a source interruption (problem with the well or pump for some number of days/weeks) in the future.
- If NESC were added as a customer, a precedent for YWMD expansion would likely evolve into allowing other new customers. Since Yosemite Conservancy and Scenic Wonders have already specifically applied, *why does the Provost&Pritchard report not also consider the effect of the extra capacity of those customers too before recommending any expansion?*
  - Even if Provost&Pritchard has no information about other customers yet, *how could a decision for one new customer at a time not be considered piece-mealing under CEQA?*
- *Why does the Provost & Pritchard report not address the overall “approval process”, and in particular how the owners of Yosemite West properties will be allowed to vote on any proposed water district expansion?*