

COMMITTEE BRIEFING MEMO

Placement and Drafting of High-Demand Water Plan Check Requirements

JOSHUA BASIN WATER DISTRICT

Drafting note: The 2-AFY plan-check and 10-AFY Board-review thresholds shown in this draft are **recommended starting points for discussion**, not final engineering determinations. The Board could reasonably consider lower or higher alternatives (for example, 1/5 AFY or 5/25 AFY). **Final thresholds should be validated using recent billing data and reviewed by District engineering and legal counsel before adoption.**

Recommendation

Place the enforceable requirements in Article 3 of JBWD's Rules & Regulations as a **High-Demand Water Plan Check**. A separate Board policy is optional and should be used only if the Board wants a broader statement of groundwater-management, recharge, reliability, and cost-responsibility principles. Technical calculation methods and processing details can be maintained administratively.

Why the Rules & Regulations Are the Better Primary Vehicle

A standalone policy is not legally necessary for the District to establish an enhanced review process for unusually large new or expanded water demands. Article 3 already governs project review, feasibility, water availability, required facilities, and development agreements. Adding the High-Demand Water Plan Check there extends the District's existing service-review framework rather than creating a separate and potentially overlapping regulatory document.

- The Rules & Regulations are the natural place for the trigger, required applicant information, review criteria, conditions of service, Board review, and consequences of material changes in demand.
- A demand-based trigger is more closely tied to JBWD's water-service authority than restrictions based on a business type, customer class, or land-use label.
- JBWD's existing rate structure is based on meter size and water consumption rather than customer class, which supports a neutral, demand- and impact-based approach.

Why a Separate Policy Could Still Be Useful

A concise Board policy can still be useful as a supplement if the Board wants to articulate broad governing principles that extend beyond the processing of individual applications. Such a policy could state that the District will:

- manage extraordinary demands according to water-system impact rather than land-use classification;
- protect long-term groundwater sustainability and imported-water recharge objectives;
- avoid shifting unreasonable recharge, infrastructure, or operating costs to existing customers;
- apply objective and consistent review standards; and
- require applicant-funded improvements or other mitigation when supported by technical analysis.

If the Board does not need that broader policy statement, the same principles can be incorporated into the purpose and findings of the Rules amendment and the adopting resolution. This avoids unnecessary duplication and reduces the risk of inconsistent documents.

Groundwater and Recharge Context

The rationale should not be framed as an immediate water shortage if JBWD has very large quantities of groundwater in storage. The stronger rationale is long-term basin management and the effect of unusually large new demands on imported-water recharge, groundwater-level objectives, pumping and treatment costs, infrastructure capacity, reliability margins, and costs borne by existing customers.

The High-Demand Water Plan Check should therefore ask whether a proposed demand materially changes the District's water-supply, recharge, infrastructure, operational, or financial requirements—not merely whether the requested quantity physically exists in the aquifer.

Recommended Structure

Document	Function
Board policy (optional)	Broad purposes, basin-management principles, cost-responsibility principles, and intended outcomes.
Rules & Regulations	Enforceable trigger, applicant requirements, review criteria, conditions of service, Board review, and change-in-demand provisions.
Administrative procedure / technical standards	Demand calculations, modeling standards, submittal requirements, staff workflow, and other details that may need periodic revision.

Bottom line: For JBWD, the preferred structure is an Article 3 amendment establishing a land-use-neutral High-Demand Water Plan Check. A separate policy may supplement the Rules, but the policy should not be the sole source of enforceable requirements.

Practical Screening and Administration

The District can administer the High-Demand Water Plan Check without requiring an acre-foot calculation for every ordinary service application. A short initial screening should identify projects that need enhanced review while allowing routine residential and small-service applications to proceed normally.

Recommended Initial Screening

For each new service, expanded service, or material change in use, the application should request the applicant's estimated average monthly use, maximum monthly use, annual use, proposed meter size, and a brief description of the proposed water use. For ordinary single-family residential service, the District may establish a presumption that a High-Demand Water Plan Check is not required unless the applicant identifies unusually high anticipated demand or District staff has information reasonably indicating that the applicable threshold may be exceeded.

Using the preferred illustrative 2-AFY screening threshold, staff can generally work in District billing units rather than acre-feet: 2 AFY is approximately 871 units per year, or about 73 units per month on average. An application reasonably expected to remain below that level would proceed through the normal service/plan-check process; an application at or above that level would be referred for a High-Demand Water Plan Check; and an uncertain application would require the applicant to provide additional demand information.

Screening Indicators

Application characteristic	Recommended treatment
Standard single-family residence	Presumed below threshold unless information indicates otherwise
Ordinary small commercial service	Applicant provides estimated demand; staff performs screening
Estimated demand $\geq$ 2 AFY (~73 units/month avg.)	High-Demand Water Plan Check
Estimated demand $\geq$ 10 AFY (~363 units/month avg.)	High-Demand Water Plan Check + Board review
Large irrigation demand	Staff evaluates projected annual and peak demand
Process/manufacturing or other intensive water use	Staff evaluates projected annual and peak demand
Large development or master-metered project	Evaluate aggregate project demand
Unusually large meter or fire-flow requirement	Staff verifies anticipated demand/system impact
Major change to existing service or use	Re-screen anticipated demand
Staff reasonably believes estimate is understated	Require supporting demand calculation

Existing Customers

The High-Demand Water Plan Check should generally apply when a customer requests new service, expanded service, or a material change in use. Existing customers should not automatically become subject to a new plan check merely because historical consumption crosses a numerical threshold. Instead, increased consumption at an existing service should be coordinated with the District's existing authority under Article 1.37, Change in Service Facility, which addresses changes in the size or character of use of a service installation and allows the District to examine customer water-use activities. Where a proposed change in the character or intensity of an existing use is reasonably anticipated to meet or exceed the High-Demand Water Plan Check threshold, the proposed change should be reviewed under Article 3.3.1. Where billing records instead show an unexpected, material, and sustained increase in actual consumption, Article 1.37 can serve as the initial review mechanism to determine whether the service facility, meter, system capacity, or other District requirements need to be reevaluated.

This distinction also avoids duplicating the existing meter-flow provisions in Articles 1.34 and 1.37. Those provisions primarily address meter and service-facility capacity, while the proposed High-Demand Water Plan

Check adds an annual-volume and broader system-impact review. A customer can have substantial annual demand without exceeding the instantaneous flow limitation of its meter, so the two provisions address related but different concerns.

Threshold Validation Using Billing Data

Before final adoption, staff should analyze approximately 12 to 24 months of District consumption data to determine how many existing accounts would fall above candidate thresholds such as 1, 2, 5, and 10 AFY. This will show whether a proposed threshold is truly unusual in the JBWD service area and help the Board understand the administrative reach of each option. For context, 1 AFY is about 36 units per month; 2 AFY about 73; 5 AFY about 182; and 10 AFY about 363, compared with an average customer at approximately 8 units per month.

Recommended Administrative Language

“Initial Screening. The District shall initially screen applications for new or expanded water service based upon information provided by the Applicant, District records, proposed meter size, reasonably anticipated water demand, and other readily available information. Standard residential service may be presumed not to exceed the High-Demand Water Plan Check threshold unless information available to the District reasonably indicates otherwise.”

“If the District determines that reasonably anticipated demand may exceed the applicable threshold, the Applicant shall provide sufficient information to establish the reasonably anticipated annual, average, and peak water demand of the proposed service.”

“The District shall not be required to perform a detailed High-Demand Water Plan Check for an application reasonably determined through initial screening to fall below the applicable threshold. The scope of any High-Demand Water Plan Check shall be proportionate to the reasonably anticipated demand and potential impacts of the proposed service, as determined by the District.”

PROPOSED RULES & REGULATIONS LANGUAGE

High-Demand Water Plan Check

Draft for discussion and legal/engineering review

Reference Conversions

For reference, 1 acre-foot (AF) is approximately 325,851 gallons. One District billing unit is assumed to equal 100 cubic feet, or approximately 748 gallons.

Threshold	Gallons/year	District units/year	Avg. gallons/day	Avg. units/month
1 AFY	325,851	~436	~893	~36
2 AFY	651,702	~871	~1,785	~73
5 AFY	1,629,255	~2,178	~4,464	~182
10 AFY	3,258,510	~4,356	~8,927	~363
25 AFY	8,146,275	~10,891	~22,319	~908

Proposed Article 3.3.1 – High-Demand Water Plan Check

A. Purpose and Applicability

Proposed new water service, expansion of existing water service, or a material change in water use that meets the criteria established in this Article shall be subject to a High-Demand Water Plan Check.

The High-Demand Water Plan Check is an enhanced technical review of proposed water demand and its potential effects upon District water supplies, groundwater management and recharge activities, facilities, operations, and costs. Its purpose is to determine whether and under what conditions the District can provide the proposed level of water service while maintaining reliable service to existing customers.

The High-Demand Water Plan Check relates solely to matters within the District's authority concerning the provision of water service and shall not constitute approval or disapproval of any land use, development, business, or activity within the jurisdiction of another public agency.

B. High-Demand Water Plan Check Threshold

A High-Demand Water Plan Check shall be required when:

1. Reasonably anticipated annual potable water demand equals or exceeds 2 acre-feet per year (approximately 651,700 gallons, 871 District billing units annually, or an average of approximately 73 units per month);
2. Reasonably anticipated maximum-day or peak demand, regardless of annual consumption, may materially affect District production, pumping, transmission, storage, pressure, treatment, or distribution capacity; or
3. The proposed service would require substantial new or upgraded District facilities or may create other material water-supply or operational impacts, as reasonably determined by the District.

The requirement for a High-Demand Water Plan Check shall be based upon the reasonably anticipated water demand and impacts associated with the proposed service and shall not be based solely upon the customer's business, industry, land-use designation, or customer class.

C. Information Required

An Applicant for a High-Demand Water Plan Check shall provide such information as the District reasonably determines necessary to evaluate the proposed service, which may include estimated annual water demand; average-day, maximum-day, and peak-hour demands; anticipated seasonal and daily demand patterns; proposed meter size and fire-flow requirements; anticipated project phasing and timing of demand; a description of significant water-using processes or activities; proposed water efficiency, conservation, recycling, reuse, or demand-management measures, if applicable; and other information reasonably necessary to determine the effect of the proposed service upon District water supply or facilities.

The District may require preparation or review of engineering, hydraulic, water-supply, financial, or other technical analyses reasonably necessary to evaluate the proposed service. The Applicant shall be responsible for District costs associated with such review in accordance with applicable District fees and deposit requirements.

D. High-Demand Water Plan Check Evaluation

In evaluating a High-Demand Water Plan Check, the District shall consider, as applicable: reasonably available water supplies; groundwater basin conditions and long-term groundwater reliability; the District's groundwater recharge activities, including the acquisition and recharge of imported water; the amount, timing, duration, variability, and location of the proposed demand; existing and planned well production, pumping, transmission, storage, treatment, pressure, and distribution capacity; potential impacts upon the reliability and level of service provided to existing customers; facilities or improvements necessary to accommodate the proposed demand; incremental capital, operating, energy, treatment, water-supply, recharge, and other costs reasonably attributable to serving the proposed demand; applicable regulatory requirements; adopted District water-resource, capital-improvement, master-planning, and similar planning documents; and other technically supportable factors reasonably related to the District's provision of water service.

E. Determination and Conditions of Service

Following review, the District shall determine whether the proposed service is feasible and the conditions, facilities, improvements, agreements, or other requirements reasonably necessary for the District to provide such service.

Subject to applicable law and these Rules and Regulations, such requirements may include construction or funding of facilities reasonably necessary to provide the proposed service; phasing of service or demand consistent with available District capacity; compliance with specified maximum demand or operational parameters where reasonably necessary for system operation; payment of applicable capacity charges, connection charges, plan-check costs, engineering costs, and other lawfully established District fees and charges; execution of a development, service, reimbursement, or other agreement where appropriate; and reasonable measures necessary to address identifiable impacts of the proposed service upon District facilities or operations.

Approval following a High-Demand Water Plan Check shall not constitute a guarantee of any particular quantity, pressure, or uninterrupted supply of water except as expressly provided by written agreement or applicable District Rules and Regulations.

F. Board Review

A High-Demand Water Plan Check shall require approval by the Board of Directors before issuance of a final water-service commitment when:

1. Reasonably anticipated annual potable water demand equals or exceeds 10 acre-feet per year (approximately 3.26 million gallons, 4,356 District billing units annually, or an average of approximately 363 units per month);
2. Substantial District-funded capital improvements are anticipated to be necessary to provide the proposed service;
3. The General Manager determines, based upon engineering, operational, financial, or water-resource considerations, that the proposed service may have a material effect upon District-wide water supply or system reliability; or
4. Board approval is otherwise required under these Rules and Regulations.

Board consideration under this section shall be limited to matters within the District's authority relating to water service and shall not constitute a determination concerning the appropriateness of the underlying land use.

G. Changes in Proposed or Actual Demand

An Applicant shall promptly notify the District of any material change in the water demand, use, phasing, facilities, or other information upon which the District's determination was based. The District may require additional review when such a change may materially affect water supply, system capacity, facilities, or operations.

Where actual or proposed water demand materially exceeds the level upon which a service approval was based, the District may require further evaluation and such additional facilities or service conditions as are reasonably necessary to accommodate the increased demand, subject to applicable law.

H. Existing Service and Article 1.37

Nothing in this Article limits the District's authority under Article 1.37 to review changes in the size or character of use of an existing service or to examine a customer's water-use activities. Where a proposed change in the character or intensity of use of an existing service is reasonably anticipated to meet or exceed the High-Demand Water Plan Check threshold, the proposed change shall be subject to the applicable requirements of this Article.

Where District records demonstrate a material and sustained increase in water use at an existing service that may exceed the applicable High-Demand Water Plan Check threshold, the District may review the service pursuant to Article 1.37 and may require information reasonably necessary to determine whether the increased demand requires a change in the service facility, additional facilities, or other action under these Rules and Regulations.

Recommended Conforming Edits

Article 1.37 – Change in Service Facility

Add a cross-reference clarifying that a proposed change in the character or intensity of an existing service that meets the High-Demand Water Plan Check criteria is also subject to Article 3.3.1.

Suggested language:

“Where a proposed change in the size, character, or intensity of use of an existing service meets the criteria for a High-Demand Water Plan Check, the customer shall additionally comply with Article 3.3.1.”

Article 3.1 – Project Initialization

Add the following cross-reference at the end of the existing project-initiation review language:

“District staff will review the proposed water and/or wastewater demand requirements and will determine if the project is compatible with existing District facilities and whether additional review is required pursuant to Article 3.3.1, High-Demand Water Plan Check.”

Article 3.3 – District’s Determination of Feasibility

Add the following sentence after the opening feasibility language:

“Projects meeting the criteria for a High-Demand Water Plan Check shall additionally comply with Article 3.3.1.”

FOR DISCUSSION ONLY: Recommended Threshold Structure

Projected Demand / Impact	Recommended Treatment
Under 2 AFY	Normal Article 3 plan check
2–9.99 AFY	High-Demand Water Plan Check by staff
10+ AFY	High-Demand Water Plan Check plus Board approval
Any demand with material system impacts	High-Demand Water Plan Check regardless of AFY
Any project requiring substantial District investment or system commitment	Board review regardless of AFY

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