Shadowbox Studios Development Water Supply Assessment

## Presentation Outline

SB 610 WSA Requirements

## The Water Supply Assessment

- Unlike UWMPs, WSAs are project-specific analyses that are required when a city or county lead agency determines the project is subject to CEQA
- WSAs must determine whether projected supplies will be available during normal, single-dry, and multiple dry years to meet the demand of the project as well as existing and planned future uses over 20-year planning horizon
- Projected supplies can include future planned supplies
- Water supplier's Board of Directors are required to adopt a WSA
- If the water supplier concludes that water supplies are, or will be, insufficient, the water supplier "... shall provide to the City or County its plans for acquiring additional water supplies"
- An adopted WSA is not subject to direct legal challenge and can only be challenged as part of a CEQA action against the lead agency


## Project Location



The Shadowbox Studios Development is located between Via Princessa and $12^{\text {th }}$ Street east of Railroad Avenue in the town of Newhall

## Shadowbox Studios Project Description

- The Project is within SCV Water's service area.
- The Project consists of:
- 473,000 sf of sound stages
- 561,500 sf of workshops, warehouses and support uses
- 221,000 sf of production and administrative offices
- 37,500 sf of catering and specialty services
- 17.1 acres of landscape irrigation


## SB 610 Requirement: <br> Shadowbox Studios Demand Assessment Analysis

| TABLE 2-6 |  |  |  |
| :---: | :---: | :---: | :---: |
| Unit | \# of units | Unit Type | Demand (AFY) |
| Landscape Irrigation | 17.1 | Acres | 55.71 |
| Commercial/Office | 258.5 | TSF | 74.1 |
| Industrial | 1034.5 | TSF | 65.9 |
|  | Total Average Year Demands (AFY) |  | 196 |
|  | Projected Single Dry Year Demands (AFY) |  | 207 |
|  | Projected Multiple Dry Year Demands (AFY) |  | 200 |

Note: Totals reflect additional demand of 25.6\% above MWELO demands and a $3.77 \%$ climate
change factor

## Water Supply Approach

- Project's WSA relies on SCV Water's current and water supply portfolio
- The WSA references the supply portfolio as described in the 2020 UWMP with modifications due to:
- DWR’s Final 2021 SWP Delivery Capability Report
- Modified schedules for the recovery of impacted well capacity due to PFAS, VOC and Perchlorate contamination


## SWP Table A Reliability Table

Table 3-1

## SWP TABLE A SUPPLY RELIABILITY (AF)(a)(b)

| Wholesaler (Supply Source) | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 5}$ | $\mathbf{2 0 3 0}$ | $\mathbf{2 0 3 5}$ | $\mathbf{2 0 4 0 - 2 0 5 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Average Water Year ${ }^{(\mathrm{c})}$ |  |  |  |  |  |
| SWP Table A Supply | 53,312 | 52,360 | 51,408 | 50,456 | 49,504 |
| \% of Table A Amount ${ }^{(\mathrm{d})}$ | $56 \%$ | $55 \%$ | $54 \%$ | $53 \%$ | $52 \%$ |
| Single-Dry Year |  |  |  |  |  |
| SWP Table A Supply ${ }^{(\mathrm{f})}$ | 2,856 | 2,618 | 2,380 | 2,142 | 1,904 |
| $\%$ of Table A Amount ${ }^{(\mathrm{f})}$ | $3 \%$ | $3 \%$ | $3 \%$ | $2 \%$ | $2 \%$ |
| Multiple-Dry Year |  |  |  |  |  |
| SWP Table A Supply ${ }^{(\mathrm{g})}$ | 23,800 | 23,800 | 23,800 | 23,800 | 23,800 |
| \% of Table A Amount ${ }^{(\mathrm{d})}$ | $25 \%$ | $25 \%$ | $25 \%$ | $25 \%$ | $25 \%$ |

## Future \& Proposed Supplies

| Planned Supplies | Amount (AFY) | Proposed OnLine Date |
| :---: | :---: | :---: |
| Future and Recovered Groundwater |  |  |
| Saugus Wells 201 \& 205 | 5,820-5,030 | 2024-2025 |
| Saugus Wells 3 \& 4 | 5,240-60 | 2025 |
| Saugus Wells 5 \& 6 | 3,880-60 | 2027 |
| Saugus Wells 7 \& 8 | 3,880-60 | 2030 |
| Recovered Alluvial Wells | 20,500-23,490 | 2030 |
| Recycled Water |  |  |
| Phase 2 Projects | 2,440 | 2021-2029 |
| FivePoint Westside Communities | 5,174 | 2021-2043 |
| Banking Programs |  |  |
| Rosedale-RB Additional Extraction | 10,000 | 2030 |
| Semitropic - NLF | 4,950 | 2035 |
| Nickel Water - NLF | 1,607 | 2035 |

## SB 610 Requirement

## Water Balance Analysis

Performed for:

- Normal
- Single Dry-Year
- Multiple Dry-Years

| Projected Single-Dry Year Supplies and Demands (AF) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
| Existing Supplies |  |  |  |  |  |  |
| Existing Groundwater ${ }^{(\mathrm{a})}$ |  |  |  |  |  |  |
| Alluvial Aquifer ${ }^{(r)}$ | 8,130 | 6,330 | 5,590; | 5,590 | 5,590; | 5,590 |
| Saugus Formation ${ }^{(r)}$ | 16,320 | 17,880 | 17,880 | 17,880 | 17,880 | 17,880 |
| Total Groundwater | 24,450 | 24,210 | 23,470 | 23,470 | 23,470; | 23,470 |
| Recycled Water ${ }^{(0)}$ |  |  |  |  |  |  |
| Total Recycled | 450 | 450 | 450; | 450 | 450; | 450 |
| Imported Water |  |  |  |  |  |  |
| State Water Project ${ }^{(c)}$ | 2,618 | 2,380 | 2,142 | 1,904 | 1,904: | 1,904 |
| Article 56 Carryover ${ }^{\text {(s) }}$ | 5,000 |  |  |  |  |  |
| Flexible Storage Accounts ${ }^{(d)}$ | 6,060 | 4,680 | 4,680 | 4,680 | 4,680 | 4,680 |
| Buena Vista-Rosedale | 11,000 | 11,000 | 11,000 | 11,000 | 11,000 | 11,000 |
| Nickel Water - Newhall Land ${ }^{(\text {(e) }}$ | - |  | 1,607: | 1,607 | 1,607: | 1,607 |
| Yuba Accord Water ${ }^{(t)}$ | 1,000 | - | - | - | - |  |
| Total Imported | 25,678 | 18,060 | 19,429 | 19,191 | 19,191 | 19,191 |
| Existing Banking and Exchange Programs |  |  |  |  |  |  |
| Rosedale Rio-Bravo Bank ${ }^{(9)}$ | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Semitropic Bank ${ }^{(n)}$ | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Semitropic - Newhall Land Bank ${ }^{\text {(h)( }}$ ( | - | - | 4,950 | 4,950 | 4,950; | 4,950 |
| Antelope Valley East Kern Water Agency Exchange ${ }^{(i)}$ | - | - | - | - | - |  |
| United Water Conservation District Exchange ${ }^{(0)}$ | - | - | - | - | - |  |
| Total Bank/Exchange | 15,000 | 15,000 | 19,950 | 19,950 | 19,950 | 19,950 |
| Total Existing Supplies ${ }^{(\text {P) }}$ | 65,578 | 57,720 | 63,299 | 63,061 | 63,061 | 63,061 |
| Planned Supplies |  |  |  |  |  |  |
| Future and Recovered Groundwater ${ }^{(0)}$ |  |  |  |  |  |  |
| Alluvial Aquifer ${ }^{(k)(r)}$ | 11,580; | 17,020 | 20,500 | 20,500 | 20,500; | 20,500 |
| Saugus Formation ${ }^{(1)(\text { (r) }}$ | 7,540 | 15,920 | 15,920 | 15,920 | 15,920 | 15,920 |
| Total Groundwater | 19,120 | 32,940 | 36,420 | 36,420 | 36,420 | 36,420 |
| Recycled Water ${ }^{(m)}$ |  |  |  |  |  |  |
| Total Recycled | 1,849: | 3,696 | 5,091; | 6,498; | 7,499; | 8,511 |
| Planned Banking Programs |  |  |  |  |  |  |
| Rosedale Rio-Bravo Bank ${ }^{(n)}$ | - | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Total Banking | 0 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Total Planned Supplies | 20,969 | 46,636 | 51,511 | 52,918 | 53,919: | 54,931 |
| Total Supplies (Existing and Planned) ${ }^{(p)}$ | 86,547 | 104,356 | 114,810: | 115,979 | 116,980 | 117,992 |
| Demands ${ }^{\text {(O)(P) }}$ |  |  |  |  |  |  |
| Demands with passive conservation | 87,000 | 94,700 | 103,500 | 110,600 | 116,200: | 122,000 |
| Demands with passive and active conservation | 81,000 | 86,600 | 94,000 | 99,200 | 103,400 | 107,100 |

## SB 610 Requirement: Supply exceeds Demand

SUPPLY AND DEMAND COMPARISON with the Shadowbox Studios Project

| Year | Normal Year Supply (AF) | Normal Year Demand (AF) with Project | Remaining <br> Balance (AF) | Single-Dry Year Supply (AF) | Single-Dry Year Demand (AF) with Project | Remaining Balance (AF) | 5-Year Dry Period Supply (AF) | 5-Year Dry Period Demand (AF) with Project | Remaining <br> Balance (AF) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2025 | 101,344 | 76,400 | 24,944 | 88,689 | 81,000 | 7,689 | 105,643 | 77,830 | 27,813 |
| 2030 | 104,506 | 81,700 | 22,806 | 106,736 | 86,600 | 20,136 | 114,033 | 83,620 | 30,413 |
| 2035 | 109,298 | 88,700 | 20,598 | 117,428 | 94,000 | 23,428 | 125,555 | 90,570 | 34,985 |
| 2040 | 109,745 | 93,600 | 16,145 | 118,835 | 99,200 | 19,635 | 130,089 | 95,780 | 34,309 |
| 2045 | 110,746 | 97,500 | 13,246 | 119,836 | 103,400 | 16,436 | 131,020 | 99,670 | 31,350 |
| 2050 | 111,758 | 101,000 | 10,758 | 120,848 | 107,100 | 13,748 | 128,720 | 102,870 | 25,850 |

Conclusion: Water Supply is sufficient to meet projected demands in normal, multi dry-years and single dry-years throughout the study period

## Conclusion:

- Staff has evaluated the long-term water demands and has compared these needs against existing and planned water supplies.
- Demand projections were based on:
- Population projections
- County and City land use plans
- Both active and passive conservation
- Climate change impacts
- The WSA concluded that the total projected water supplies over the 30 -year projection period will be sufficient to meet the projected demands associated with the proposed Shadowbox Studios Development as well as existing and planned future uses.


## Recommendation

That the Board of Directors of the Santa Clarita Valley Water Agency adopt a resolution approving the SB 610 Water Supply Assessment for the Shadowbox Studios Development and direct staff to submit the WSA to the City of Santa Clarita.

## Questions?

