

**MEMORANDUM
WESTERN PLACER WASTE MANAGEMENT AUTHORITY**

TO: **WPWMA BOARD OF DIRECTORS** DATE: **DECEMBER 13, 2018**
FROM: **BILL ZIMMERMAN / ERIC ODDO** 
SUBJECT: **WASTE ACTION PLAN – SELECTION OF A PREFERRED PROJECT
CONCEPT AND INITIATION OF ENVIRONMENTAL REVIEW**

RECOMMENDED ACTION:

1. Approve Plan Concept 1 as the preferred conceptual facility site layout.
2. Authorize staff to initiate the environmental review process in accordance with CEQA for the preferred conceptual facility site layout.

BACKGROUND:

Over the past two years, staff and CH2M have engaged key stakeholders in a master planning process resulting in development and analysis of potential reconfigurations of the WPWMA's properties to meet the needs of its Member Agencies. CH2M is completing the final report for these efforts. A draft copy of the report is available for review at the WPWMA's offices; the executive summary is included as Attachment A. Master planning drivers and goals were summarized into a fact sheet used when engaging stakeholders (Attachment B). As a result of the master planning process, three facility site layout plan (Plan) concepts were developed, brief narratives of which are included in Attachment C. Throughout this process, staff has periodically returned to your Board to provide project updates and seek direction, noting that staff would seek approval by the end of calendar year 2018 to enter the next phase of the process by initiating environmental review of a preferred concept.

As part of the technical evaluation, CH2M prepared a Multi Objective Decision Analysis (MODA) and present value (PV) cost analysis of the three Plan concepts. At the November 8, 2018 meeting, staff and CH2M presented preliminary results to your Board with the intent of soliciting feedback and informing your Board of the anticipated next steps in the process. At that time, your Board directed staff to conduct additional analysis regarding revenues and potential impacts to the WPWMA's tipping fees associated with each Plan concept, finalize the MODA and PV estimates, and return with a recommendation of a preferred Plan concept.

Staff and CH2M have updated the MODA and PV analysis consistent with your Board's comments as noted below.

MODA and PV Analysis

CH2M finalized the MODA scores which are presented in Attachment D. As noted at the November 8th meeting, the MODA results indicate that Plan Concept 1 best meets the WPWMA's project goals.

CH2M also finalized the PV analysis with a focus on refining anticipated planning-level costs over a 25-year planning horizon. Using these cost figures and the WPWMA's financial forecasting tool, staff prepared a preliminary estimate of potential impacts to tipping fees associated with each Plan concept over an initial 10-year period. The final PV results and preliminary tipping fees impacts are presented in Attachment E.

Environmental Review Phase

As previously reported to your Board, the next phase of the master planning process involves CEQA review of one or more Plan concepts. While performing environmental review will hone the details of the Plan concept(s), it will not obligate when or how individual elements of the Plan concepts are implemented. Instead, the analysis will provide an approved mitigation strategy and the ability for the WPWMA to amend its operating permits to allow the uses proposed in the preferred Plan concept. Prior to implementing any Plan concept elements, staff will return to your Board for consideration and direction related to project timing, methods of financing, design, construction and operation of the Plan elements.

The MODA and PV analysis suggest that Plan Concept 1 would best meet the WPWMA's goals at the lowest relative cost. As such, staff recommends initiating environmental review with Plan Concept 1 as the preferred project option. Other options available to your Board include:

1. Proceed with environmental review with Plan Concept 2 as the preferred option;
2. Proceed with environmental review with Plan Concept 1 and Plan Concept 2 as equal weight alternatives; or
3. Terminate or suspend the master planning process and operate within the current permit conditions.

The CEQA process provides opportunities for your Board to continue providing direction to staff and for public input on the WPWMA's project. Staff believes it is important to maintain transparency with continued enhanced stakeholder engagement throughout the environmental review process. Attachment F provides a conceptual schedule identifying CEQA-required public review and comment periods, and possible additional stakeholder engagement opportunities.

ENVIRONMENTAL CLEARANCE:

The recommended actions do not constitute a project under the California Environmental Quality Act.

FISCAL IMPACT:

The cost associated with performing the environmental review process on a single preferred Plan Concept is approximately \$1,050,000. This cost is included in the CH2M Agreement and was factored into the WPWMA's FY 2018/19 Budget.

Preliminary estimates suggest that conducting full environmental review of both Plan Concepts 1 and 2 could increase this cost by approximately \$500,000 and extend the environmental review period by approximately 6 months. If your Board elects to pursue this option, staff will prepare an amendment to the CH2M Agreement for consideration by your Board at a future meeting.

ATTACHMENTS: ATTACHMENT A – EXECUTIVE SUMMARY
ATTACHMENT B – WASTE ACTION PLAN FACT SHEET
ATTACHMENT C – PLAN CONCEPT NARRATIVES
ATTACHMENT D – FINAL MODA SCORES
ATTACHMENT E – FINAL PRESENT VALUE ESTIMATES AND POTENTIAL TIPPING FEE IMPLICATIONS
ATTACHMENT F – CONCEPTUAL ENVIRONMENTAL REVIEW SCHEDULE



Proactively meeting the infrastructure needs of western Placer County areas through responsible solid waste management.

THE ISSUES



▶ **California** is aggressively expanding regulations to reduce materials going to landfills

▶ **75%**
Required organics diversion from landfills by 2025



▶ **Western Placer County** on pace to outgrow existing solid waste facilities due to increasing population

▶ **200%**
Expected population increase in Placer County and its cities by 2050



China and other international recyclers are closing their doors, destabilizing markets and impacting solid waste facility capacities across the US, including Placer County.

CONSEQUENCES OF INACTION



The WPWMA's composting and recycling facilities will not be able to accept additional waste within

▶ **2–5 years**

Placer County jurisdictions could be forced to:



build additional solid waste facilities

OR




transport waste to other landfills outside the county or state



Which will require significant time and resources and could result in:

Higher rates passed to customers through garbage bills

Loss of local control over rates and services provided to solid waste customers

<p>BOTTOM LINE</p>	 <p>Without modification, WPWMA's existing facilities lack capacity necessary to meet regulatory and regional growth demands. Failure to address waste management infrastructure needs now will lead to significant cost implications for western Placer County jurisdictions, residents and businesses in the near future.</p>	<p>THE PLAN</p>  <p>The WPWMA is planning <i>now</i> to ensure that western Placer County is well positioned to meet the needs of residents and businesses into the future while complying with regulations, supporting planned regional growth, and creating opportunity for innovation.</p>
<p>PROJECT GOALS</p>	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%; text-align: center;">  <p>Increase facility recycling and landfill diversion</p> </div> <div style="width: 33%; text-align: center;">  <p>Create opportunities for industrial innovation and economic growth</p> </div> <div style="width: 33%; text-align: center;">  <p>Provide capacity to support current and future population and development</p> </div> <div style="width: 33%; text-align: center;">  <p>Provide a safeguard for future generations by maintaining local control and stable rates</p> </div> <div style="width: 33%; text-align: center;">  <p>Ensure compliance with expanding regulations</p> </div> <div style="width: 33%; text-align: center;">  <p>Enhance operational compatibility with current and future neighboring land uses</p> </div> </div>	
<p>PROJECT CONCEPTS</p>	<p>The project concepts represent possible facility configurations to meet the project goals. The concepts focus on the four critical facility functions, including:</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 22%;"> <p>Landfill Provide capacity to accommodate regional growth, maintain control of costs, disposal methods</p> </div> <div style="width: 22%;"> <p>Composting Process additional materials to meet regulations; minimize associated odors</p> </div> <div style="width: 22%;"> <p>Construction & Demolition Increase operating capacity, efficiency, and material diversion; maintain competitive rates</p> </div> <div style="width: 22%;"> <p>Public Drop-off Maintain safety and convenience; reduce traffic congestion</p> </div> </div> <p style="text-align: center;"><i>Visit WPWMA.com for project conceptual layouts</i></p>	
<p>PROCESS</p>	<div style="display: flex; justify-content: space-around;"> <div style="width: 30%; text-align: center;">  <p>Engage a wide range of stakeholders and interested parties for input on project concepts</p> </div> <div style="width: 30%; text-align: center;">  <p>Evaluate facility needs in a transparent process by conducting studies to support project decisions</p> </div> <div style="width: 30%; text-align: center;">  <p>Implement selected project concept based on informed WPWMA Board decision</p> </div> </div>	
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>WESTERN PLACER WASTE MANAGEMENT AUTHORITY</p> </div> <div style="text-align: right;"> <p>Stay informed</p> <hr style="width: 100px; margin: 0 auto;"/> <p>WPWMA.COM  </p> </div> </div>		

**PLAN CONCEPT 0
EXISTING SITE RECONFIGURED**

Ability to Meet Project Goals

Increase recycling rates	X
Maintain local control	
Regulatory compliance	X
Provide long-term recycling capacity	X
Provide long-term disposal capacity	
Enhance compatibility	X
Opportunity for innovation	

General Description

All future solid waste activities will occur exclusively on the existing permitted 320-acre parcel. The WPWMA could elect to continue leasing to tenants or sell the western and eastern properties.

Processing and Recycling Operations

Core processing and recycling operations (MRF, C&D and composting) will occur on the northern portion of the existing property. Systems will be sized to accommodate anticipated material growth rates over the next 25 years. Maintaining relatively close and compact proximity of these operations to each other is intended to initially yield increased operational efficiencies and reduce operating costs. Flexibility to further expand or modify these operations in the future may be hampered by lack of available space between operations.

Landfill Operations

Modules 1, 2, 10 and 11 (closed, unlined modules) will be immediately excavated and relocated to a lined module to facilitate expansion of processing and recycling operations. The space currently allocated for future Modules 8 and 9 will be utilized for processing and recycling operations and no longer available for landfilling. The overall permitted capacity of the landfill will be reduced from ~36.5 million cubic yards to ~17.7 million cubic yards, yielding an estimated remaining landfill life of approximately 30 years. Upon closure, wastes will continue to be received at the facility, processed for diversion, and the residuals transferred via long-haul trucks to a third-party landfill. Potential local options include Recology’s Ostrom Road Landfill, Sacramento County’s Kiefer Landfill, and Yolo County’s Central Landfill.

Compatible Operations and Opportunities for Innovation

Space for compatible operations, emerging technology pilot studies and collaboration with universities is not included in this concept. The WPWMA could potentially pursue a separate project in the future to permit the western and eastern properties for such uses.

Enhanced Compatibility

Facility odors could be reduced by utilizing ASP composting technologies and earlier closure of the landfill, although opportunities to employ new odor-reducing waste processing technologies may be more limited (compared to Concepts 1 and 2) due to lack of available space



**PLAN CONCEPT 1
LANDFILL EAST**

Ability to Meet Project Goals

Increase recycling rates	X
Maintain local control	X
Regulatory compliance	X
Provide long-term recycling capacity	X
Provide long-term disposal capacity	X
Enhance compatibility	X
Opportunity for innovation	X

General Description

The majority of the 158-acre eastern property will be reserved for future landfill capacity. MRF and C&D operations will remain proximate to each other on the existing 320-acre property. Composting and other organics management will occur on the 480-acre western property. Portions of the western property will be reserved for compatible third-party operations.

Processing and Recycling Operations

Systems will be sized to accommodate anticipated material growth rates over the next 25 years. Placement on the western property provides additional space specifically allowing for expansion of composting operations as necessitated by current and anticipated future organics regulations.

Landfill Operations

Future filling operations could occur on the eastern property. Modules 1, 2, 10 and 11 (closed, unlined modules) will be excavated and relocated to a lined module to facilitate expansion of processing, recycling operations and additional landfill space if necessary. Excavation and relocation can be phased as needed or as finances allow. The space currently allocated for future Module 9 will be utilized for processing and recycling operations and no longer available for landfilling. Landfill capacity will increase from ~36.5 million cubic yards to ~75.8 million cubic yards, yielding an estimated remaining landfill life of approximately 90 years.

Compatible Operations and Opportunities for Innovation

A significant portion of the western property will be available for compatible operations, emerging technology pilot studies and collaboration with universities. Doing so will serve to increase the recovery and marketability of materials and produce alternative fuels and energy.

Enhanced Compatibility

Concept 1 provides the WPWMA the greatest opportunity to employ new odor-reducing waste processing technologies such as ASP composting. Landfill odors could persist for a longer period compared to Concepts 0 and 2 due to a longer projected remaining life.



**PLAN CONCEPT 2
LANDFILL WEST**

Ability to Meet Project Goals

Increase recycling rates	X
Maintain local control	X
Regulatory compliance	X
Provide long-term recycling capacity	X
Provide long-term disposal capacity	X
Enhance compatibility	X
Opportunity for innovation	X

General Description

Over half of the 480-acre western property will be reserved for future landfill capacity. All non-landfill solid waste activities will occur exclusively on the existing permitted 320-acre parcel. Portions of the eastern property will be reserved for compatible third-party operations and could also include a biological reserve area.

Processing and Recycling Operations

Systems will be sized to accommodate anticipated material growth rates over the next 25 years. Maintaining relatively close and compact proximity of these operations to each other should initially yield increased operational efficiencies and reduce operating costs. Flexibility to further expand or modify these operations in the future may be hampered by the lack of available, unencumbered space between the individual operations.

Landfill Operations

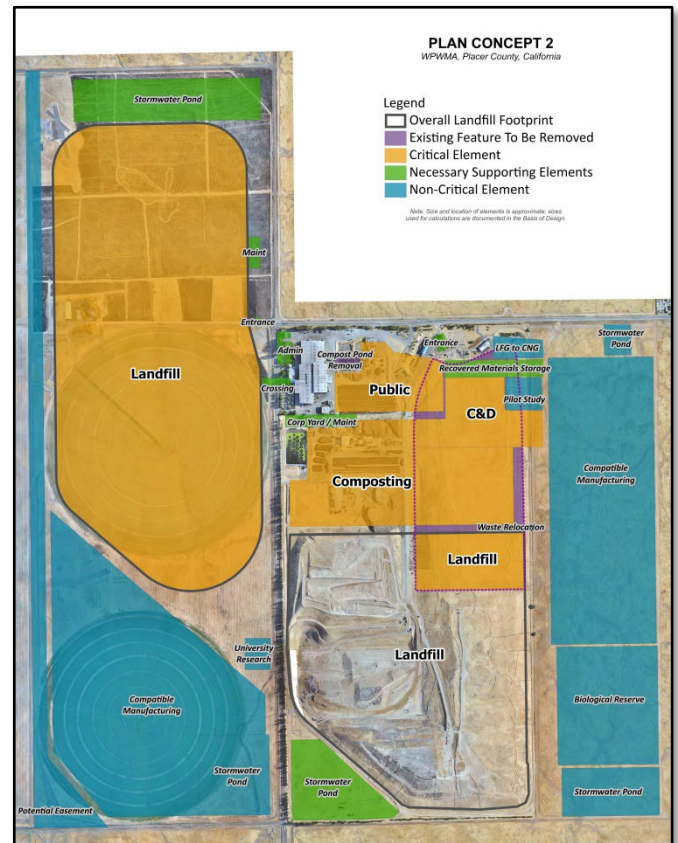
Future filling operations could occur on the western property. Modules 1, 2, 10 and 11 (closed, unlined modules) will be immediately excavated and relocated to a lined module to facilitate expansion of processing and recycling operations. The space currently allocated for future Modules 8 and 9 will be utilized for processing and recycling operations and no longer available for landfilling. Landfill capacity will increase from ~36.5 million cubic yards to ~54.3million cubic yards, yielding an estimated remaining landfill life of approximately 70 years.

Compatible Operations and Opportunities for Innovation

A significant portion of the eastern property will be available for compatible operations, emerging technology pilot studies and collaboration with universities, which could serve to increase recycling rates and produce alternative fuels and energy.

Enhanced Compatibility

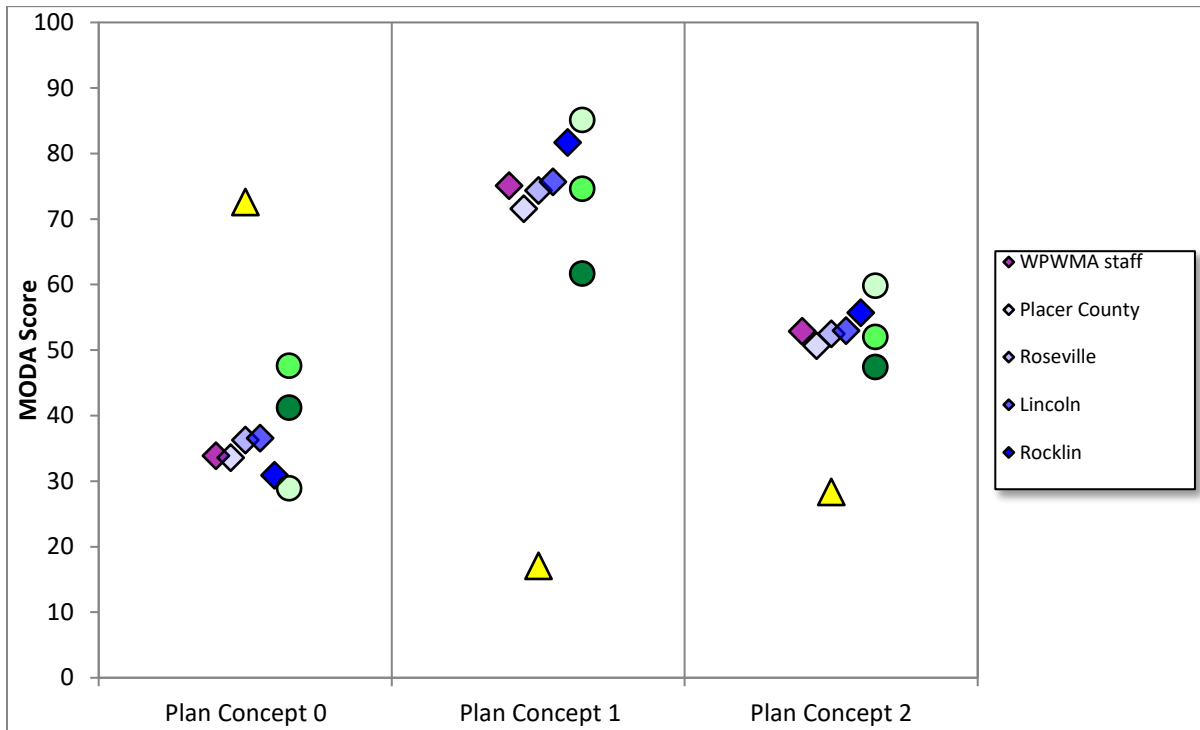
Concept 2 provides the WPWMA some opportunity to employ new odor-reducing waste processing technologies such as ASP composting. Landfill odors could persist for a longer period compared to Concepts due to a longer project remaining life.



MODA Scores

The following summarizes the final MODA scores.

Profile	MODA Score		
	Concept 0	Concept 1	Concept 2
WPWMA staff	33.9	75.1	52.9
Advisory Committee	34.4	75.8	53.0
Proximate Stakeholders	41.2	61.7	47.4
Odor Potential	72.6	17.1	28.4
Operational Capacity	28.9	85.1	59.8
Financial Implications	47.6	74.6	52.0

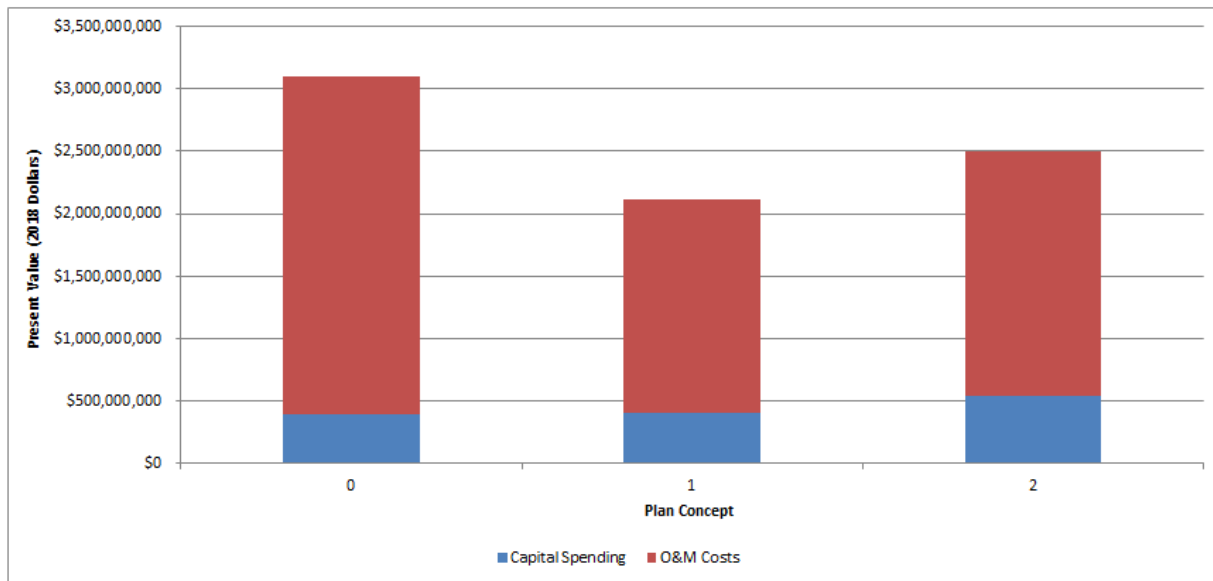


Present Value Cost Estimates

Client: WPWMA
 Project: Renewable Placer - Waste Action Plan
 Date: December 7, 2018

Summary of Concept Costs, Present Value, 2018 Dollars (Rounded)

Plan Concept	Capital Spending	O&M Costs	Total Project Present Value	Annualized Capital Spending	Annualized O&M Costs	Annualized Project Present Value
0 Existing Site Reconfigured	\$394,300,000	\$2,697,800,000	\$3,092,100,000	\$9,400,000	\$64,600,000	\$74,100,000
1 Landfill East	\$407,300,000	\$1,710,000,000	\$2,117,300,000	\$9,800,000	\$41,000,000	\$50,700,000
2 Landfill West	\$539,900,000	\$1,957,300,000	\$2,497,200,000	\$12,900,000	\$46,900,000	\$59,800,000



Possible Impact to Tipping Fees and Typical Residential Garbage Rates

For the purposes of analyzing the potential future impacts to the WPWMA’s rate structure, staff utilized the WPWMA’s Financial Forecasting tool and the annual capital and operating cost estimates prepared by CH2M. Using these inputs, staff utilized a combination of possible revenue sources including: use of reserves, public financing and tipping fee increases to balance costs and revenues over the 10 year period beginning in FY 2021/22.

In conducting this initial financial analysis, staff used the following assumptions:

1. Only the Fixed Asset reserve account would be utilized as a source of available revenues. The Contingency reserve account – typically used for landfill liner and cover projects – would continue to be held in reserve for future landfill development needs.
2. Public financing debt service based on a fixed rate of 4% over 30 years.
3. Changes in tip fees apply equally to all material types based on a fixed percentage increase.

For the purposes of understanding the potential impact to customers by virtue of the need to increase tipping fees, staff utilized the garbage collection rate setting tools utilized by Placer County for its franchise agreement with Recology as well as the rate setting model used by the City of Roseville. Using these tools, staff estimated the monthly garbage collection cost for a typical residential customer who has 96-gallon toter service.

The following tables and chart summarize the findings of this analysis.

Plan Concept 1

Level of public financing: \$125 million

Fiscal Year	Tip Fee Increase	Placer County – Recology Model		City of Roseville Model	
		Monthly Cost	Monthly Increase	Monthly Cost	Monthly Increase
2020/21	0%	\$30.98	-	\$24.35	-
2021/22	15%	\$32.62	\$1.64	\$25.47	\$1.12
2022/23	2.5%	\$32.95	\$0.33	\$25.69	\$0.22
2023/24	2.5%	\$33.27	\$0.32	\$25.91	\$0.22
2024/25	2.5%	\$33.60	\$0.33	\$26.14	\$0.23
2025/26	2.5%	\$33.94	\$0.34	\$26.37	\$0.23
2026/27	2.5%	\$34.29	\$0.35	\$26.61	\$0.24
2027/28	2.5%	\$34.65	\$0.36	\$26.85	\$0.24
2028/29	2.5%	\$35.01	\$0.36	\$27.10	\$0.25
2029/30	2.5%	\$35.40	\$0.39	\$27.35	\$0.25
2030/31	2.5%	\$35.77	\$0.37	\$27.62	\$0.27

Plan Concept 2

Level of public financing: \$225 million

Fiscal Year	Tip Fee Increase	Placer County – Recology Model		City of Roseville Model	
		Monthly Cost	Monthly Increase	Monthly Cost	Monthly Increase
2020/21	0%	\$30.98	-	\$24.35	-
2021/22	15%	\$32.62	\$1.64	\$25.47	\$1.12
2022/23	5%	\$33.26	\$0.64	\$25.90	\$0.43
2023/24	5%	\$33.93	\$0.67	\$26.35	\$0.45
2024/25	5%	\$34.63	\$0.70	\$26.82	\$0.47
2025/26	15%	\$36.82	\$2.19	\$28.31	\$1.49
2026/27	5%	\$37.66	\$0.84	\$28.87	\$0.56
2027/28	2.5%	\$38.10	\$0.44	\$29.17	\$0.30
2028/29	0%	\$38.10	\$0.00	\$29.17	\$0.00
2029/30	0%	\$38.10	\$0.00	\$29.17	\$0.00
2030/31	0%	\$38.10	\$0.00	\$29.17	\$0.00

Phase II Environmental Review Stakeholder Engagement

CEQA-Required Engagement	Additional Proposed Engagement Opportunities	Anticipated Schedule
Notice of Preparation (NOP)		January 2019
	Scoping Meeting	30 days following NOP
	<p>Renewable Placer Working Group Meetings</p> <p>Inform CEQA process and potentially waste planning beyond this project.</p> <p>Estimated 6 meetings before Draft EIR for joint fact-finding, education, and option generation.</p> <p>Proposed membership: 6-10 stakeholders.</p>	12 – 16 months following NOP
	<p>Stakeholder Engagement Meetings</p> <p>Proposed monthly meetings or calls with stakeholders as needed in support of Working Group and/or other topics identified in Scoping Meeting.</p>	
Draft Environmental Impact Report Released for 45-day comment period	Public meeting to receive comments on Draft EIR at WPWMA Board meeting during 45-day review period	
	Optional meeting(s) if needed to review comments on Draft EIR with commenters	
Final Environmental Impact Report Release		17 – 24 months following NOP
	Optional meeting(s) if needed to review comments on Final EIR with commenters	
Final hearing for WPWMA Board to certify the EIR and approve Project		