



**CITY OF ALBANY  
CITY COUNCIL AGENDA  
STAFF REPORT**

Agenda Date: October 7, 2024  
Reviewed by: NA

**SUBJECT:** Battery-Powered Electric Riding Lawnmower Purchase – Request for Funding Appropriation from Public Works Reserve (Fund 2210)

**REPORT BY:** Mark Hurley, Public Works Director/City Engineer  
Devora Zauderer, Program Manager

---

**SUMMARY**

The Public Works Department has completed its investigation of electric alternatives for gas-powered riding lawnmowers, as a way of reducing the City’s reliance on fossil fuels for frequently utilized equipment. Similar to the recent battery-powered landscape equipment purchase, staff reviewed multiple vendors and selected a vendor that has a combination of performance, reliability, support and cost.

As projected in the Biennial Operating Budget, staff is now seeking Council authorization for appropriation of Public Works Equipment Reserve funding in the amount of \$40,000 for the purchase of a battery-powered electric riding lawnmower to replace the current stock of two gas powered riding mowers.

**STAFF RECOMMENDATION**

That Council adopt Resolution No. 2024-71, appropriating \$40,000 from the Public Works Reserve (Fund 2210) for the purchase of a battery-powered electric riding lawnmower.

**BACKGROUND**

The California Air Resources Board says that “Gallon for gallon of gasoline used, the small gasoline engines found in lawn mowers, leaf blowers, and other power equipment pollute at a higher rate than other equipment and vehicles.”

Albany’s Public Works Department, similar to other agencies, utilizes a variety of small gas-powered equipment for use in landscape maintenance and other operations. Over the years, staff has looked to transition the City’s stock of small gas-powered equipment to electric when there is a suitable battery-powered replacement.

In 2018, Council adopted Resolution No. 2018-15 authorizing participation in the Bay Area Air Quality District’s (BAAQMD) Lawn and Garden Equipment Exchange Program. Public Works worked with the BAAQMD and identified six pieces of gas-powered equipment (a

weed eater, a blower and two chainsaws and two brush cutters) that qualified for replacement under the grant program.

Assembly Bill No. 1346, signed into law by Governor Newsom in 2021, authorized the California Air Resources Board to prohibit the sale of new gas-powered lawn and garden equipment. That prohibition has gone into effect as of January 1, 2024. While the City can still use existing gas-powered equipment, Public Works staff has researched replacements for gas-powered equipment and is prepared to transition most remaining equipment to battery electric. This transition was planned for in the current biennial operating budget.

In April 2024, Council adopted Resolution No. 2024-18 appropriating funds from the Public Works equipment reserve for the purchase of battery electric landscaping tools. With this funding, staff purchased the Husqvarna tools detailed in the supporting Staff Report to replace items in the City's stock of gas-powered equipment.

## **DISCUSSION**

Public Works Maintenance staff have understood the need to reduce dependency on fossil fuels and have sought to transition to electric or battery-powered equipment when suitable replacements are available. Staff has several years of experience with battery-powered equipment through the BAAQMD grant and more recently through the equipment purchased with funds appropriated by Council in April.

In early 2024, Public Works Maintenance staff began researching different options to replace the City's two gas-powered riding lawnmowers with a single battery-powered mower. Staff engaged with other agencies, our landscape contractor (who already uses battery-powered equipment) and companies that supply and maintain landscaping to identify a broad range of manufacturers that make quality battery-powered mowers and selected three – Mean Green, Stihl and Toro – for onsite demonstrations. All three companies are leading manufacturers with quality products and robust service support.

Staff attended demonstrations with each of the three manufacturers and where were able to test the range of models from each manufacturer. All three manufacturers have models that performed well, although they did have their differences in their designs and features. Also, each mower includes a battery charger that works with a standard outlet.

Based on this initial demonstration, Staff selected two mowers, one from Mean Green and one from Stihl, for more in-depth testing. This test included a weeklong performance test where staff used the mower on the regular mowing schedule. Staff ultimately selected the Stihl model based on its overall performance and features, which include having some elements of the mower that are mechanical and can be repaired more easily in-house. Stihl also provides actively monitoring of the mower's performance through cellular network to identify issues early and mitigate inoperable equipment time.

The pricing for all considered mowers ranges from \$27,000 to \$43,000, depending on the model options selected. Final pricing on the Stihl model is pending but is expected to be on the lower end of this price range.

### **SUSTAINABILITY CONSIDERATIONS**

As this change is being driven by State mandates, life-cycle analysis of gas versus battery-powered landscaping equipment wasn't considered. Battery production can result in significant environmental harms but quantifying those harms and weighing them against the effects of using gas-powered equipment isn't a simple proposition. The differences in emissions during use, however, are very clear. As referenced above, these small engine tools are among the most polluting equipment regularly used by Public Works. Approval of this purchase will not only reduce current pollution levels but will protect the health of Maintenance Workers, as well as homeowners and tenants who are exposed to gas and oil fumes. Additionally, battery-powered tools are much quieter than their gas-powered equivalents and will therefore reduce the noise pollution in Albany.

This action supports the City's Climate Action & Adaptation Plan Goal 2, Action 1.2.4, which encourages increasing adoption of electric motorized equipment.

### **SOCIAL EQUITY AND INCLUSIVITY CONSIDERATIONS**

In discussing the prohibition on gas-powered equipment, Richard Corey (at the time the executive director of the California Air Resources Board), pointed out that the ban will provide significant health benefits for Californians, including those in low-income neighborhoods and communities of color, which tend to experience the highest exposure to pollutants. Residents who live near parks and open spaces where these tools are used will have the benefit of reduced local emissions as well as quieter neighborhoods.

### **CITY COUNCIL STRATEGIC PLAN INITIATIVES**

This purchase will help fulfill two of the Council's Strategic Plan Initiatives:

- GOAL 1: Advance Climate Action & Adaptation
- GOAL 6: Increase Public Health, Safety & Resiliency

### **FINANCIAL CONSIDERATIONS**

The mower, including options and tax will cost approximately \$40,000. Funds for this purchase are recommended to be appropriated from the Public Works Equipment Reserve. No ongoing budget adjustments are required.

### **Attachments**

1. Resolution 2024-71

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

**RESOLUTION NO. 2024-71**

**A RESOLUTION OF THE ALBANY CITY COUNCIL APPROPRIATING FUNDS FROM THE PUBLIC WORKS EQUIPMENT RESERVE FOR THE PURCHASE OF A BATTERY-POWERED ELECTRIC RIDING LAWNMOWER**

**WHEREAS**, the California Air Resources Board (CARB) states that small gasoline engines pollute at a higher rate than other equipment and vehicles; and

**WHEREAS**, as authorized by Assembly Bill No. 1346, CARB has prohibited the sale of new gas-powered lawn and garden equipment as of January 1, 2024; and

**WHEREAS**, staff has researched and field-tested various battery electric riding lawnmowers, and selected a model suitable to the current level of service required; and

**WHEREAS**, this purchase supports the City’s Climate Action & Adaptation Plan goals and provides a less polluting and quieter service than the use of their gas-powered equivalents.

**NOW, THEREFORE, BE IT RESOLVED**, that the Albany City Council hereby authorizes the appropriation of \$40,000 from the Public Works Equipment Reserve Fund toward the purchase of a battery-powered electric riding lawnmower.

\_\_\_\_\_  
JOHN MIKI, MAYOR