Monterey Bay Aquarium Research Institute

E.I.N. # 770150580

Reports on Financial Statements and Federal Award Programs in Accordance with the OMB Uniform Guidance

December 31, 2021

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Report of Independent Auditors

To the Board of Directors of Monterey Bay Aquarium Research Institute

Opinion

We have audited the accompanying financial statements of Monterey Bay Aquarium Research Institute (the "Institute"), which comprise the statement of financial position as of December 31, 2021, and the related statements of activities and of cash flows for the year then ended, including the related notes (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Institute as of December 31, 2021, and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Institute and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Institute's ability to continue as a going concern for one year after the date the financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS and *Government Auditing Standards*, will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with US GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Institute's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedule of expenditures of federal awards for the year ended December 31, 2021 is presented for purposes of additional analysis as required by Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) and is not a required part of the financial statements. As described in Note 1 to the schedule of expenditures of federal awards, the accompanying schedule of expenditures of federal awards was prepared on the cash basis, which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated, in all material respects, on the basis of accounting described in Note 1, in relation to the financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 9, 2022 on our consideration of the Institute's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters for the year ended December 31, 2021. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Institute's internal control over financial reporting and compliance.

PricewaterhouseCoopers LLP

San Francisco, California
June 9, 2022

Monterey Bay Aquarium Research Institute
Statement of Financial Position
December 31, 2021

(in thousands of dollars)

Assets		
Cash and cash equivalents	$	61,838
Receivables		
The David and Lucile Packard Foundation		76,274
Federal awards and other		3,479
Prepaid expenses and other assets		1,935
Deposits on capital acquisitions		14,658
Deferred compensation plan investments		6,001
Property and equipment, net		51,168
Total assets	$	215,353
Liabilities and Net Assets		
Liabilities		
Accounts payable	$	4,028
Accrued expenses and other liabilities		6,302
Deferred compensation plan liabilities		6,001
Postretirement benefit liabilities		18,105
Total liabilities		34,436
Net assets		
Without donor restrictions		
Undesignated		50,311
Board designated		21,309
From The David and Lucile Packard Foundation		
For ongoing operations		51,274
For vessel and shore side infrastructure		58,023
Total net assets		180,917
Total liabilities and net assets	$	215,353

The accompanying notes are an integral part of these financial statements.

Monterey Bay Aquarium Research Institute
Statement of Activities
Year Ended December 31, 2021

(in thousands of dollars)

Revenue and other support		
Funding from The David and Lucile Packard Foundation	$	51,324
Federal awards		13,221
Nonfederal awards		658
Other		913
Total revenue and other support		66,116
Expenses		
Research and development		48,296
Marine operations		3,141
Information and technology dissemination		1,805
Operational support		8,506
Total expenses		61,748
Increase in net assets, before nonoperating postretirement activity		4,368
Components of net periodic postretirement benefit cost other than service cost		2,336
Postretirement benefit-related changes other than		-
net periodic postretirement benefit cost		(1,890)
Increase in net assets		4,814
Net assets without donor restrictions		
Beginning of year		176,103
End of year	$	180,917

The accompanying notes are an integral part of these financial statements.

Monterey Bay Aquarium Research Institute
Statement of Cash Flows
Year Ended December 31, 2021

(in thousands of dollars)

Cash flows from operating activities		
Cash received from donors	$	147
Cash received from grants		11,813
Cash received from other support		734
Cash received from interest		41
Cash paid for employees		(33,849)
Cash paid for program expenses		(18,415)
Cash paid for taxes		(6)
Cash paid from deferred compensation		(158)
Net cash used in operating activities		(39,693)
Cash flows from investing activities		
Purchase of deferred compensation plan investments		(1,864)
Proceeds from maturity of certificates of deposit		5,000
Purchase of certificates of deposit		(500)
Proceeds from sale and maturity of deferred comp investments		1,773
Deposit on capital acquisitions using capital grant funding		(14,658)
Purchase of property and equipment using capital grant funding		(5,296)
Purchase of property and equipment		(7,515)
Net cash used in investing activities		(23,060)
Cach flows from financing activities		
Cash received from The David and Lucile Packard Foundation		79,540
Net cash provided by financing activities		79,540
Net increase in cash and cash equivalents		16,787
Cash and cash equivalents		
Beginning of year		45,051
End of year	$	61,838

The accompanying notes are an integral part of these financial statements.

(in thousands of dollars)

1. Organization and Summary of Significant Accounting Policies

Organization

The Monterey Bay Aquarium Research Institute (the "Institute") is a not-for-profit organization founded in 1987 for the purpose of conducting scientific research in marine biology, oceanography, underwater geology, and other kinds of marine research in and around the Monterey Bay and elsewhere and to educate the scientific community and the general public in regard to such research. The Institute's primary facilities are located in Moss Landing, California.

Since 1994, The David and Lucile Packard Foundation (the "Foundation") has been the Institute's only member, with the power to elect the Board of Directors. In 2021 approximately 78% of the Institute's revenues and other support came from the Foundation. In addition, certain trustees and officers of the Foundation are also directors or officers of the Institute.

Basis of Presentation

The financial statements are presented on the accrual basis of accounting and in conformity with accounting principles generally accepted in the United States of America ("generally accepted accounting principles") and with the provisions of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 958, *Not-for-Profit Entities,* which requires the Institute to classify its net assets into two categories according to donor-imposed restrictions – net assets without donor imposed restrictions and net assets with donor-imposed restrictions.

Net Assets without Donor Restrictions

Net assets without donor restrictions represent resources which do not have donor-imposed stipulations available to support the Institute's operations. Additionally, an operating reserve has been established for use on specific projects subject to the Board of Directors' approval. Funding received from the Foundation are considered equity transactions. In 2021 the Foundation committed to fund the Institute's subsequent year's operations in the amount of $51,274. Additionally, in 2020, the Institute was awarded funding in the amount of $75,000 for specified capital projects. This funding, together with an award received in 2017 of $10,000, will be used on those specified capital projects. The remaining receivable from this funding as of December 2021 is $25,000. As these funds are used to pay for those capital projects, the Institute will report these funds as undesignated within net assets without donor restriction on the statement of financial position.

Net Assets with Donor Restrictions

Net assets with donor restrictions represent contributions that are limited in use by the Institute in accordance with donor-imposed stipulations. These stipulations may expire with time or may be satisfied and removed by the actions of the Institute according to the terms of the contributions. At December 31, 2021 there were no net assets with donor restrictions.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates include the accrual for postretirement benefit liabilities and the estimated useful life for property and equipment.

(in thousands of dollars)

Concentrations of Credit Risk

Financial instruments that potentially subject the Institute to credit risk consist primarily of cash and cash equivalents and receivables. Cash and cash equivalents are maintained by major financial institutions and include investments in money market funds. At times, such amounts may exceed Federal Deposit Insurance Corporation limits. Receivables consist primarily of funds due from the Foundation (Note 3). The Institute closely monitors receivables and has not experienced significant credit losses to date.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and in banks, money market funds and highly liquid investments purchased with an original maturity date of three months or less.

Other Assets

The Institute's other assets include deferred compensation plan investments and certificates of deposits with original maturity dates greater than 90 days which are reported at fair value.

Certificates of deposit totaled $497 as of December 31, 2021.

Investments

Fair value is determined in accordance with accounting principles generally accepted in the United States of America. Fair value is defined as the amount that would be exchanged for an asset or to transfer a liability between market participants in an orderly transaction at the measurement date. The Institute determines fair value based upon the fair value hierarchy established under applicable accounting guidance which requires an entity to prioritize the use of observable market-based inputs over the use of unobservable inputs when measuring fair value. Investments are categorized as Level 1 when the valuation is based upon quoted prices in active markets for identical assets or liabilities; Level 2 when the valuation is based upon inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3 when the valuation is based upon unobservable inputs in which little or no market data exists, therefore requiring the Institute to develop assumptions to determine the best estimate of fair value. All of the Institute's financial securities (nonretirement investments) are considered Level 1, as disclosed in the following table:

	2021			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 59,577	$ -	$ -	$ 59,577
Certificates of deposit	497	-	-	497
	$ 60,074	$ -	$ -	$ 60,074

Investment transactions are recorded on a trade date basis. Realized gains and losses on dispositions of investments represent the difference between the original cost of the investment and the proceeds received from the sale.

(in thousands of dollars)

Property and Equipment
Property and equipment are stated at cost or at the fair market value at the date of donation and are depreciated on the straight-line basis over the estimated useful lives of the assets (3 to 30 years). Capitalized costs for self-constructed assets include direct labor and benefits for employees specifically identified with the project. Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Revenue Recognition
Contributions are recognized as revenues when they are unconditionally pledged or received. The Institute reports contributions of cash and other assets as support with donor restrictions if they are received with donor stipulations that limit the use of the donated assets. When a donor restriction expires, that is, when a stipulated time restriction ends or purpose restriction is accomplished, net assets with donor restrictions are reclassified to net assets without donor restriction and reported in the accompanying statement of activities as net assets released from restrictions. Contributions with donor restrictions are reported as contributions without donor restrictions when the restriction is met in the same period as the contribution is received.

Contracts deemed exchange contracts are recognized in accordance with ASC 606. The core principle of ASC 606 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Revenue is measured based on consideration specified in a contract with a customer. We recognize revenue when it satisfies a performance obligation by transferring control over goods and services to a customer.

Performance Obligations
The Institute is occasionally engaged by organizations with the intention to transfer goods or services which are outlined by a scope of work in every contract and have discrete pricing associated with the service to be provided. Each service is accounted for as a separate performance obligation. Generally, these performance obligations are satisfied over time and recognize revenue as the goods or services are provided, as this best represents the transfer of control to the customer. The Institute had $29 in outstanding receivables associated with contracts accounted for under ASC 606 as of December 31, 2021. The Institute deferred $83 of revenue and expenses associated with contracts as of December 31, 2021.

Disaggregation of Revenue
The Institute's revenue is disaggregated by customer type, contract type and service type. The majority of the Institute's exchange contract revenue is from contracts with government entities either directly or as a subcontractor and is recognized over time as the services are performed. These contracts are cost reimbursable. The Institute also earns royalty revenues from the licensing and sales of intellectual property which are recognized at a point in time.

(in thousands of dollars)

The following table disaggregates revenue based on the timing of revenue recognition for the year ending December 31, 2021:

		2021
Over time (procurement)	$	303
Point in time (royalties)		203
	$	506

Deferred Grant Revenue
Deferred grant revenue represents funds which have been received for programs which have not yet been completed or taken place, and therefore have not yet been earned.

Income Taxes
The Institute is a not-for-profit corporation as described in Section 501(c)(3) of the Internal Revenue Code (the "Code") and is exempt from federal and state income taxes pursuant to Section 501(a) of the Code and Section 23701(d) of the California Tax Code. To the extent that the Institute carries out activities that are subject to unrelated business income tax, it is subject to income taxation.

The Institute is a private operating foundation within the meaning of Section 509(a) of the Code that makes its required charitable expenditures by sponsoring and managing its own programs.

Pursuant to Section 4940(a) of the Code, the Institute's investment income, reduced by certain allowable expenses, is subject to excise tax at a rate of 1.39% of investment income. The Institute's status as an operating foundation is determined annually by satisfying the income test and certain other numerical tests. Generally, a private operating foundation must make qualifying distributions of 4.25% of the average fair value of the foundation's investment assets directly for the active conduct of the activities for which it is organized and operating. The Institute has met the requirements for private operating foundation status through December 31, 2021.

New Accounting Pronouncements
In February 2016, the FASB issued ASU 2016-02, *Leases*, which requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in the statement of financial position. The guidance also expands the required quantitative and qualitative disclosures surrounding leases. The ASU is effective for fiscal year 2022 for the Institute. The Institute is evaluating the impact of the new guidance on the financial statements.

(in thousands of dollars)

2. Property and Equipment

Property and equipment at December 31, 2021 consist of the following:

		2021
Land	$	4,236
Buildings		55,300
Research vessels		46,652
Remotely operated vehicles		24,338
Ocean deployed equipment		32,028
General equipment, furniture, and fixtures		21,257
Capital projects in progress		18,080
		201,891
Less: Accumulated depreciation		(150,723)
Property and equipment, net	$	51,168

Depreciation expense for the year ended December 31, 2021 was $8,387. As of December 31, 2021, the carrying value of the leased property for which the Institute is the lessor is as follows:

		2021
Land	$	165
Buildings		1,397
Less: Accumulated depreciation		(1,194)
Lease property, net	$	368

Change in estimates

During 2021 the Institute formalized plans to decommission the Research Vessel (“RV”) Western Flyer and real property commonly known as Building G. The RV Western Flyer and its improvements are depreciated over a period of 10 years and have been revised down to 18 months to coincide with its decommissioning in September of 2022 with an estimated salvage value of $400. Building G and its improvements are depreciated over a period of 30 years and have been revised down to 12 months to coincide with its expected demolition as of June 2022. The effect of these changes on actual and expected depreciation expense is as follows.

		2021		2022
Increase in depreciation expense - Western Flyer	$	337	$	253
Increase in depreciation expense - Building G		290		249
Total	$	627	$	502

3. Related-Party Transactions

In December of 2021, the Institute received funding from the Foundation to support the subsequent year’s operations. The receivable from the Foundation was $51,274 as of December 31, 2021 and

(in thousands of dollars)

is included in net assets without donor restrictions. In addition to the funding for the Institute's operations, the Institute received funding from the Foundation in the amount of $75,000 on October 30, 2020 for project management and construction costs for a new flagship research vessel and related onshore infrastructure, capital grant. In 2021 the Institute received $30,000 of the capital grant from the Foundation. The receivable from the Foundation for the capital grant as of December 2021 is $25,000.

4. Commitments and Contingencies

The Institute leases certain land and facilities under noncancelable operating leases. The terms of these leases expire in 2025 through 2039, with certain options to renew. Certain rental rates are subject to adjustment based on increases in the consumer price index. Future minimum lease payments under noncancelable operating leases as of December 31, 2021 are approximately as follows:

Year ending December 31,		
2022	$	217
2023		221
2024		223
2025		176
2026		36
Thereafter		520
	$	1,393

Rent expense was $216 for the year ended December 31, 2021.

During 2021 the Institute entered into contracts with Construcciones Navales P. Freire S.A. to construct a new research vessel and Avila Brothers, Inc. to construct a field expedition staging building. The contract amount with Construcciones Navales P. Freire S.A. is $41,880 which the Institute made deposits of $14,658 during 2021. The remaining amount of $27,222 is to be paid out in 2022 and 2023 in accordance with the completion of specific milestones. The contract amount with Avila Brothers, Inc is $4,651 with installments of $1,869 paid during 2021. The remaining $2,782 is to be paid during 2022.

As of December 31, 2021 the Institute has $500 on deposit as collateral to guarantee that the Institute will comply with the provisions of a land lease entered into with the State of California, California State Lands Commission to obtain right-of-way use needed for the operation of one of the Institute's projects, the MARS Project, respectively. This amount is included in prepaid expenses and other assets in the statement of financial position.

The Institute derives a portion of its revenues from various federally funded programs that are subject to review and audit by governmental oversight agencies. Institute management believes that the Institute is in material compliance with the standards set forth by the federal governmental agencies and that the outcome of reviews and audits conducted by such agencies will not have a significant effect on the financial position of the Institute.

(in thousands of dollars)

Claims
Claims are filed from time to time against the Institute in the ordinary course of business. The Institute is not aware of any such matters that would have a material adverse effect on the Institute's financial position.

5. Minimum Future Rental Revenues

The Institute leases land and facilities to others under noncancelable leases with lease terms expiring in 2022 and 2025, with options to renew. Certain rental rates are subject to annual increases ranging up to 3%.

Minimum future rental receipts from operating leases having noncancelable lease terms in excess of one year as of December 31, 2021 are approximately as follows:

Year ending December 31, 2021		
2022	$	110
2023		40
2024		40
2025		41
Thereafter		-
	$	231

6. Retirement Plans

The Institute sponsors a defined contribution plan under IRC 403(b). The Plan covers all employees who meet eligibility requirements. Contributions to the 403(b) plan are made by the Institute at 10% of an employee's annual salary. Under the 403(b) plan and subject to statutory limits, employees may make voluntary deferred salary contributions to the Plan. Total expenses related to this plan were $2,502 in 2021.

The Institute sponsors a Section 457(b) Qualified Eligible Salary Deferral Plan (the "Salary Deferral Plan") primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employees to accumulate retirement assets. The Salary Deferral Plan enables participants to defer income on a pre-tax basis. There are no Institute contributions related to this plan. At December 31, 2021 the Institute held plan investments of $5,895 that are included in deferred compensation plan investments. These assets are designated by the Institute to pay future Salary Deferral Plan liabilities of $5,895 as of December 31, 2021. These liabilities are included in deferred compensation plan liabilities.

The Institute also sponsors a Nonqualified Deferred Compensation Restoration Plan (the "Compensation Restoration Plan") primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employees to accumulate retirement assets. The Compensation Restoration Plan provides for the Institute to make contributions to a participant's account equal to the amount in excess of IRC limits which the participant would otherwise have been eligible for in accordance with the Institute's 403(b) plan. At December 31, 2021 the Institute held plan investments of $106, that are included in deferred compensation plan investments, which are designated by the Institute to pay future Compensation Restoration Plan liabilities of $106 December 31, 2021. These liabilities are included in deferred compensation plan liabilities.

(in thousands of dollars)

At December 31, 2021 all the Institute's deferred compensation plan investments were classified as Level 1 as they are mutual funds with daily traded fair market values and consisted of the following:

		2021
Equity and bond mutual funds	$	2,487
Equity mutual funds		3,293
U.S. Government securities mutual funds		221
Total fair value of deferred compensation plan investments	$	6,001

The Institute has a contributory retiree health insurance program (the "Plan") which covers substantially all employees who meet the eligibility requirements. Each August 1, the Institute contributes on behalf of each retired employee to a health reimbursement account (HRA). The amount of the contribution is 50% of the premium in effect as of August 1, 2017 with the same family status (single or two-party coverage) as the retiree. The retiree may then spend the amount in the HRA on any medical expenses that are tax-deductible, including premiums for health insurance.

The following information presents the Plan's unfunded status and the amounts recognized in the statement of financial position as of December 31, 2021 on a measurement date of December 31:

		2021
Benefit obligation	$	18,105
Fair value of plan assets		-
Unfunded status	$	18,105
Amount recognized in the statements of financial position as postretirement benefit liabilities	$	18,105

Amounts recognized in net assets without donor restrictions at December 31, 2021 were as follows:

		2021
Net loss	$	6,436
Prior service cost		(11,489)
	$	(5,053)

The Institute Plan's net periodic postretirement benefit cost reflected in the statement of activities for the years ended December 31, 2021 was ($1,960).

(in thousands of dollars)

Changes other than net periodic postretirement benefit cost recognized in the statement of activities for the year ended December 31, 2021 was as follows:

		2021
Net actuarial loss (gain)	$	(869)
Amortization of net loss		(598)
Plan amendment		-
Amortization of prior service cost		3,357
Total changes other than net periodic postretirement benefit cost/credit	$	1,890

Total contributions paid by the Institute to the Plan for the years ended December 31, 2021 were $382. Total benefit payments made from the Plan for the years ended December 31, 2021 were $453.

The weighted-average discount rate used in determining the accumulated postretirement benefit liabilities was 2.67% as of December 31, 2021 and in determining the net periodic postretirement benefit cost was 2.30% the year ended December 31, 2021.

The Plan is fully insured and is funded on a pay-as-you-go basis. The estimated minimum benefit payments by year that reflect expected future service to be paid by the Institute are as follows:

2022	$	565
2023		634
2024		680
2025		731
2026		794
2027-2031		4,553

The annual rate of increase in the per capita cost of medical benefits (i.e., health care cost trend rate) was assumed to be 6.8% in 2022 and declining by 0.2% per year until the ultimate trend rate of 5.0% is reached by 2031.

(in thousands of dollars)

7. Analysis of Expenses

	2021					
	Program Services				Supporting Activities	
	Research and Development	Marine Operations	Information Dissemination	Program Subtotal	Operational Support	Total Expenses
Salaries, fringe, board fees	$ 20,664	$ 7,247	$ 1,004	$ 28,915	$ 5,033	$ 33,948
Other expenses and allocations	18,117	(5,057)	451	13,511	3,597	17,108
Depreciation	5,565	195	11	5,771	2,616	8,387
Occupancy	3,669	661	204	4,534	(3,205)	1,329
Travel, conferences and meetings	195	88	24	307	50	357
Printing and publications	86	7	111	204	16	220
Accounting fees				-	239	239
Legal fees				-	160	160
Postretirement benefit costs - interest and amortization	(1,422)	(499)	(69)	(1,990)	(346)	(2,336)
Total expenses	$ 46,874	$ 2,642	$ 1,736	$ 51,252	$ 8,160	$ 59,412

(in thousands of dollars)

The Institute classifies program operating cost amongst its three main activities. Cost are associated with each activity either by occurring directly within that activity or by allocation from another activity. Allocations are made for facility and ship usage to better align costs with each activity's use of resources. Total program expenses shown on the analysis of expenses do not articulate with total expenses shown on the statement of activities. Interest expense and gain amortization associated with the contributory retiree health insurance program are reflected in the analysis of expenses with their respective program activity. The Institute's expenses are classified within the following activities:

Research and Development
Develop and adapt innovative technologies for advancing our understanding of the ocean.

Marine Operations
The Division of Marine Operations serves a role in the support of the Institute's research and development by operating and maintaining the Institute's research vessels and remotely operated vehicles. The support provided by the Division of Marine Operations facilitates the work of developing, adapting and utilizing innovative technology.

Information Dissemination
Information and technology dissemination serves as a gateway for the transfer of knowledge gained, solutions devised and technologies developed to communities outside of the Institute. These communities include researchers, educators, policy makers, resource managers, industry and the general public.

(in thousands of dollars)

8. Available Resources and Liquidity

The Institute has a board designated operating reserve of $21,309 as of December 31, 2021. This is a governing board-designated reserve with the object of setting aside funds to be used on specifically approved projects. The Institute maintains the reserve at no less than $6,000 which was determined by management as the minimum needed to meet capital fluctuations during a given year. The operating reserve consists of unused funds that result from support in excess of actual expenditures. Over the course of a given year, the Institute may realize surpluses or deficits relative to its proposed revenue and expenditures; these fluctuations are added to or are deducted from the operating reserve at the end of each calendar year. The operating reserve is held as money market funds. Although the Institute does not intend to spend from its board designated funds other than amounts appropriated for general expenditure as part of its annual budget approval and appropriation process, amounts from the operating reserve could be made available by the Board of Directors if necessary.

The following represents the Institute's financial assets as of December 31, 2021.

	2021
Cash and cash equivalents	$ 61,838
David and Lucile Packard Foundation receivables	76,274
Federal awards and other receivables	3,479
Total financial assets	141,591
Less those unavailable due to designations	
Board designations	
Operating reserve	21,309
Funding from David and Luclie Packard Foundation for capital projects	58,023
Total amounts unavailable for general expenditures	79,332
Financial assets available to meet cash needs for operating expenditures within one year	$ 62,259

9. Subsequent Events

The Institute has evaluated subsequent events for the period December 31, 2021 through June 9, 2022, the date financial statements were available to be issued.

Monterey Bay Aquarium Research Institute
Schedule of Expenditures of Federal Awards
Year Ended December 31, 2021

Federal Grantor/Pass-through Grantor/Program Title	Federal Assistance Listing #	Award Number	Pass Through Number	Federal Expenditures	Pass Through to Subrecipient
Research and Development - Cluster					
National Science Foundation					
Biological sciences	47.074	DEB-1542679		$ 270,467	$ -
Biological sciences	47.074	DEB-1639033		33,036	-
Geosciences	47.050	OCE-1514756		209,707	-
Geosciences	47.050	PLR-1602946		24,888	-
Geosciences	47.074	OCE-1736864		21,982	-
Geosciences	47.074	OCE-1812535		59,339	-
Geosciences	47.050	OCE-1829805		83,235	-
Geosciences	47.050	OPP-1744773		38,627	-
Geosciences	47.050	OCE-2103137		196,910	-
Geosciences	47.050	OCE-2049117		26,371	-
Geosciences	47.050	OCE-2110258		294,016	117,806
Geosciences	47.050	OCE-1946578		4,630,657	3,631,784
Geosciences	47.050	OCE-2126537		17,795	-
Integrative Activities	47.083	OIA-2137977		634	-
Subtotal direct awards - National Science Foundation (NSF)				5,907,664	3,749,590
Pass - through from University of Rhode Island - Geosciences	47.050	OCE-1842412	0007337/01232019	14,495	-
Pass - through from Johns Hopkins University - Geosciences	47.050	OCE-1941314	2004421617	12,054	-
Pass - through from Princeton University - Geosciences	47.050	OPP-1936222	SUB0000407	779,210	-
Pass - through from Princeton University - Geosciences	47.050	PLR-1425989	SUB0000010 A6	113,057	-
Pass - through from University of Texas at Austin - Office of International Science and Engineering	47.079	OISE-2114717	UTAUS-SUB0000008	634	-
Pass - through from Stanford University - Geosciences	47.050	OCE -2023301	62448926-178401	1,121	-
Total National Science Foundation				6,828,235	3,749,590
US Geological Survey					
Direct programs					
Research and data collection	15.808	G18AC00216		51,350	-
Research and data collection	15.808	G21AC10333		119,043	-
Total US Geological Survey				170,393	-
U.S. Department of Defense - Office of Naval Research					
Direct programs					
Basic & Applied Scientific Research	12.300	N00014-18-1-2169		32,870	32,870
Basic & Applied Scientific Research	12.300	N00014-19-1-2240		188,240	-
Basic & Applied Scientific Research	12.300	N00014-20-1-2045		7,705	-
Total - U.S Department of Defence - Office of Naval Research				228,815	32,870

Monterey Bay Aquarium Research Institute
Schedule of Expenditures of Federal Awards
Year Ended December 31, 2021

Federal Grantor/Pass-through Grantor/Program Title	Federal CFDA #	Award Number	Pass Through Number	Federal Expenditures	Pass Through to Subrecipient
U.S. Department of Homeland Security					
Pass - through from University of Alaska- Centers for Homeland Security	97.061	1&STADA00001-02-00	PO516972	79,353	
Total Department of Homeland Security				79,353	-
National Aeronautics and Space Administration					
Direct programs					
Science	43.001	80NSSC17K0574		250,226	195,863
Science	43.001	80NSSC20M0032		263,479	72,378
Subtotal direct awards - National Aeronautics and Space Administration				513,705	268,241
Pass - through from University of Maine	43.001	80NSSC21K0015	UMS1319	10,337	-
Total National Aeronautics and Space Administration				524,042	268,241
National Oceanic and Atmospheric Administration					
Direct programs					
Integrated Ocean Observing System (IOOS)	11.012	NA16NOS0120021		3,764,859	2,378,875
Integrated Ocean Observing System (IOOS)	11.012	NA21NOS0120090		146,953	62,495
Subtotal direct awards - Natoinal Oceanic and Atomospheric Administration(NOAA)				3,911,812	2,441,370
Pass - through from University of Washington	11.432	NA15OAR4320063	UWSC11192	31,024	
Pass - through from University of New Hampshire	11.012	NA19OAR0110409	L0029	53,699	-
Pass - Through from University of California San Diego	11.478	NA19NOS4780181	122410489	201,775	
Pass - Through from University of California San Diego	11.478	NA20NOS4780187	704160	5,231	
Pass - Through from University of Michigan	11.432	NA17OAR4320152	SUBK00013241	80,410	
Pass - through from University of Santa Cruz	11.017	NA19OAR0170357	A20-0303-S001	54,046	
Pass - through from University of Miami - OAR Cooperative Institutes	11.432	NA15OAR4320064	SPC-000364	64,355	
Pass - through from University of Miami - OAR Cooperative Institutes	11.432	NA20OAR4320472	OS000000522	8,005	
Pass - through from University of Washington	11.478	NA19OAR4310362	UWSC11376	11,504	
Pass - through from University of Washington	11.432	NA15OAR4320063	UWSC11385	57,891	-
Pass - through from University of Washington	11.478	NA19NOS4780191	UWSC11616	43,299	
Total National Oceanic and Atmospheric Administration				4,523,051	2,441,370
Total Research and Development - Cluster				12,353,889	6,492,071
Total Expenditures of Federal Awards				$ 12,353,889	$ 6,492,071

The accompanying notes are an integral part of the financial statements

1. Basis of Presentation

The accompanying schedule of expenditures of federal awards (the "Schedule"), presents the federal grant activity of the Monterey Bay Aquarium Research Institute (the "Institute"). The information in the Schedule is presented in accordance with the requirements of Title 2 U.S. *Code of Federal Regulations* Part 200*, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Therefore, some amounts presented in the Schedule may differ from the presentation of the amounts in the financial statements. All federal awards passed through from other governmental agencies are included in the Schedule. During the year ended December 31, 2021, no noncash awards were received by the Institute. The Schedule has been prepared using the cash basis of accounting.

2. Facilities and Administrative Costs

The Institute uses its negotiated indirect cost rates rather than the 10% de minimis rate allowed by Uniform Guidance.

Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Directors of Monterey Bay Aquarium Research Institute

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of Monterey Bay Aquarium Research Institute (the “Institute”), which comprise the statement of financial position as of December 31, 2021, and the related statements of activities and of cash flows for the year then ended, including the related notes (collectively referred to as the “financial statements”), and have issued our report thereon dated June 9, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Institute’s internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control. Accordingly, we do not express an opinion on the effectiveness of the Institute's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Institute’s financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Institute's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Institute's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

PricewaterhouseCoopers LLP

San Francisco, California
June 9, 2022

Report of Independent Auditors on Compliance for Each Major Program and on Internal Control over Compliance Required by Uniform Guidance

To the Board of Directors of Monterey Bay Aquarium Research Institute

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Monterey Bay Aquarium Research Institute's (the "Institute") compliance with the types of compliance requirements identified as subject to audit in the OMB *Compliance Supplement* that could have a direct and material effect on each of the Institute's major federal programs for the year ended December 31, 2021. The Institute's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

In our opinion, the Institute complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended December 31, 2021.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (US GAAS); the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditors' Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the Institute and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the Institute's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to the Institute's federal programs.

Auditors' Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the Institute's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material, if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the Institute's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with US GAAS, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the Institute's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the Institute's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditors' Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

PricewaterhouseCoopers LLP

San Francisco, California
June 9, 2022

I. Summary of Auditor's Results

1. Financial Statements

Type of auditor's report issued:	Unmodified
Internal control over financing reporting:	
• Material weakness(es) identified?	No
• Significant deficiencies identified that are not considered	None Reported
• Reported to be material weakness(es)?	
Noncompliance material to financial statements noted?	No

2. Federal Awards

Internal control over major programs:	
• Material weakness(es) identified?	No
• Significant deficiencies identified that are not considered to be material weakness(es)?	None Reported
Type of auditor's report issued on compliance for major programs:	Unmodified
• Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	No

3. Identification of Major Programs

Assistance Listing Number	**Name of Federal Program or Cluster**
Various	Research and Development Cluster

Dollar threshold used to distinguish between Type A and Type B programs:	$750,000
Auditee qualified as low-risk auditee?	No

II. Financial Statement Findings

None to report

III. Federal Award Findings and Questioned Costs

None to report

Monterey Bay Aquarium Research Institute
Summary Schedule of Prior Audit Findings and Status
December 31, 2021

Finding 2020-001: Presentation of Funding Received from the Foundation

During the 2020 financial audit, two financial reporting misclassifications were made regarding the statement of cash flows and balance sheet. As a result a corrective action plan was adopted to prevent these misclassifications in the future. The corrective action plan involved discussing updating the process around this transaction type and reviewing authoritative materials for how these transactions are reported on an ongoing basis. As a result of implementing the corrective action plan during 2021, management considers these actions adequate to mitigate any errors in current and future financial reporting.