

# **Woods Hole Oceanographic Institution**

**Financial Statements  
December 31, 2022 and 2021**

**Woods Hole Oceanographic Institution**  
**Index**  
**December 31, 2022 and 2021**

---

	<b>Page(s)</b>
<b>Report of Independent Auditors</b> .....	1–2
<b>Financial Statements</b>	
Statements of Financial Position.....	3
Statement of Activities.....	4
Statements of Cash Flows .....	5
Notes to Financial Statements .....	6–35



## **Report of Independent Auditors**

To the Board of Trustees of  
Woods Hole Oceanographic Institution

### ***Opinion***

We have audited the accompanying financial statements of Woods Hole Oceanographic Institution (the “Institution”), which comprise the statements of financial position as of December 31, 2022 and 2021, and the related statements of activities for the year ended December 31, 2022 and of cash flows for the years ended December 31, 2022 and 2021, 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 Institution as of December 31, 2022 and 2021, the changes in its net assets for the year ended December 31, 2022, and its cash flows for the years ended December 31, 2022 and 2021 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). 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 Institution 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.

### ***Other Matter***

We previously audited 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 (the statement of activities is not presented herein), and in our report dated July 19, 2022, we expressed an unmodified opinion on those financial statements. In our opinion, the information set forth in the accompanying summarized financial information for the year then ended is consistent, in all material respects, with the audited financial statements from which it has been derived.

### ***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 Institution’s ability to continue as a going concern for one year after the date the financial statements are 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 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, 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 Institution'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 Institution'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.

*PricewaterhouseCoopers LLP*

Boston, Massachusetts  
July 14, 2023

**Woods Hole Oceanographic Institution**  
**Statements of Financial Position**  
**December 31, 2022 and 2021**

	2022	2021
<b>Assets</b>		
Cash and cash equivalents, unrestricted	\$ 15,296,998	\$ 8,493,578
Cash and cash equivalents, restricted	30,074,299	25,941,450
Billed accounts receivable (net of allowance for doubtful accounts of \$92,504 for 2022 and \$75,014 for 2021)	8,105,213	6,089,322
Unbilled accounts receivable	20,410,413	26,733,356
Receivable for investments sold	22,245,556	21,247,016
Other receivables	877,956	797,178
Inventory	3,267,226	3,593,840
Deferred charges and prepaid expenses	5,794,419	5,086,180
Deposits with trustees for construction	1,573,237	1,871,813
Pledges receivable, net (Note 5)	39,009,603	14,840,619
Right of use asset	224,553	314,302
Investments designated for retiree and active medical plans (Note 3 & 10)	9,396,946	12,268,952
Investments, pooled (Note 3)	442,922,825	491,770,749
Other assets	4,051,380	4,162,144
	<u>603,250,624</u>	<u>623,210,499</u>
Property, plant and equipment		
Land, buildings and improvements	226,291,720	213,603,601
Vessels and dock facilities	26,246,608	15,784,863
Laboratory and other equipment	52,265,248	49,099,733
Construction in process	3,103,312	9,245,308
	<u>307,906,888</u>	<u>287,733,505</u>
Accumulated depreciation	<u>(187,298,611)</u>	<u>(173,968,089)</u>
Net property, plant and equipment	<u>120,608,277</u>	<u>113,765,416</u>
Contributions receivable from remainder trusts, long-term, net (Note 6)	<u>823,813</u>	<u>1,069,997</u>
Total assets	<u>\$ 724,682,714</u>	<u>\$ 738,045,912</u>
<b>Liabilities</b>		
Accounts payable and other liabilities (Note 8)	\$ 20,590,535	\$ 25,343,840
Accrued payroll and related liabilities	12,998,172	12,540,774
Deferred revenue and refundable advances	1,501,124	2,728,876
Deferred fixed rate variance (Note 7)	4,203,722	4,801,072
Right of use liability	224,553	314,302
Accrued postretirement liability (Note 10)	20,521,433	29,510,451
Accrued pension liability (Note 9)	37,041,900	81,205,652
Bonds payable (Note 8)	78,371,087	80,202,348
Total liabilities	<u>175,452,526</u>	<u>236,647,315</u>
Net assets		
Without donor restrictions	70,415,581	26,614,167
With donor restrictions	478,814,607	474,784,430
Total net assets	<u>549,230,188</u>	<u>501,398,597</u>
Total liabilities and net assets	<u>\$ 724,682,714</u>	<u>\$ 738,045,912</u>

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

**Woods Hole Oceanographic Institution**  
**Statements of Activities**  
**Years Ended December 31, 2022 and 2021**  
**With Summarized Financial Information for the Year Ended December 31, 2021**

	Without Donor Restrictions	With Donor Restrictions	2022	2021
<b>Revenues</b>				
Sponsored research				
Government	\$ 159,260,338		\$ 159,260,338	\$ 182,339,376
Ships and submersibles operations	37,450,506		37,450,506	25,301,839
Subcontracts and nongovernment	29,558,457	45,511,892	75,070,349	58,792,642
Sponsored research assets released to operations	30,264,494	(30,264,494)	-	-
Fixed price awards	380,001		380,001	78,606
Education				
Joint program income	7,510,039		7,510,039	7,031,247
Endowment income		9,373,398	9,373,398	9,211,971
Education funds released from restriction	9,817,377	(9,817,377)	-	-
Education fees	297,046		297,046	122,591
Contributions and gifts	8,390,636	67,781,533	76,172,169	25,833,881
Contributions in kind	217,656		217,656	450,347
Investment return designated for current operations	4,246,132		4,246,132	4,131,495
Releases from restrictions		(13,328,349)	(13,328,349)	(8,909,517)
Fees	1,939,441		1,939,441	1,579,728
Rental income	566,402		566,402	556,203
Communication and publications	471,083		471,083	463,226
Other	2,797,825		2,797,825	440,595
Total revenues	<u>293,167,433</u>	<u>69,256,603</u>	<u>362,424,036</u>	<u>307,424,230</u>
<b>Expenses</b>				
Research	206,434,133		206,434,133	199,839,274
Marine operations	9,746,380		9,746,380	33,379,574
Academic programs	14,869,166		14,869,166	14,989,780
Other Institution activities	19,237,348		19,237,348	10,192,998
Un-sponsored research	5,317,696		5,317,696	10,226,195
Ships and submersibles	37,450,507		37,450,507	25,301,839
Total expenses	<u>293,055,230</u>	<u>-</u>	<u>293,055,230</u>	<u>293,929,660</u>
Change in net assets from operating activities	<u>112,203</u>	<u>69,256,603</u>	<u>69,368,806</u>	<u>13,494,570</u>
<b>Nonoperating revenue and expenses</b>				
Investment return greater than amounts designated for sponsored research, education and current operations	(15,789,131)	(64,866,347)	(80,655,478)	42,650,880
Return on investments for retiree and active medical plans	(2,872,006)		(2,872,006)	877,245
Net realized/unrealized gain on interest rate swap	3,617,331		3,617,331	857,135
Change in split interest agreements	(39,767)	(360,079)	(399,846)	187,556
Other nonoperating expenses	(51,936)		(51,936)	(51,935)
Investment in Plant	6,597,222		6,597,222	-
Gain/(loss) on sale of investment			-	219,749
Net periodic benefit cost	(2,275,884)		(2,275,884)	4,123,954
Pension and post-retirement related changes other than net periodic benefit costs (Note 9)	54,503,382		54,503,382	25,370,268
Change in net assets from nonoperating activities	<u>43,689,211</u>	<u>(65,226,426)</u>	<u>(21,537,215)</u>	<u>74,234,852</u>
Total change in net assets	<u>43,801,414</u>	<u>4,030,177</u>	<u>47,831,591</u>	<u>87,729,422</u>
<b>Net assets at</b>				
Beginning of year	<u>26,614,167</u>	<u>474,784,430</u>	<u>501,398,597</u>	<u>413,669,175</u>
End of year	<u>\$ 70,415,581</u>	<u>\$ 478,814,607</u>	<u>\$ 549,230,188</u>	<u>\$ 501,398,597</u>

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

**Woods Hole Oceanographic Institution**  
**Statements of Cash Flows**  
**Years Ended December 31, 2022 and 2021**

	2022	2021
<b>Cash flows from operating activities</b>		
Total change in net assets	\$ 47,831,591	\$ 87,729,422
Adjustments to reconcile total change in net assets to net cash used in operating activities		
Depreciation	13,330,522	10,871,562
Amortization	(541,261)	(552,143)
Change in split interest agreements	399,847	(187,556)
Allowance for uncollectible pledges	1,655,770	448,230
Discount on pledges	2,101,090	145,983
Donation of Plant	(9,500,000)	-
Net realized and unrealized (gain) on investments	62,771,054	(64,708,466)
Unrealized loss on interest swap	(6,489,981)	(2,137,285)
Pension related changes other than net periodic pension costs	(54,503,382)	(25,370,268)
Contributions to be used for long-term investment	(8,193,487)	(776,545)
Receipt of contributed securities	(2,354,463)	(242,395)
Liquidation of contributed securities	2,354,463	242,395
(Increase) decrease in assets		
Reimbursable costs and fees		
Billed	(2,015,891)	874,668
Unbilled	6,322,943	1,548,265
Other receivables	(80,778)	(237,377)
Pledges receivable	(27,925,844)	(5,362,235)
Inventory	326,615	(1,014,084)
Deferred charges and prepaid expenses	(708,239)	(674,719)
Other assets	110,764	(104,331)
Remainder trusts	246,184	(29,467)
Increase (decrease) in liabilities		
Accrued pension and postretirement liability	1,350,612	(4,885,912)
Accounts payable and other liabilities	852,122	(3,529,984)
Accrued payroll and related liabilities	457,400	1,160,045
Deferred revenue and refundable advances	(1,227,751)	(648,484)
Deferred fixed rate variance	(597,349)	3,355,409
Net cash provided by/(used by) in operating activities	<u>25,972,551</u>	<u>(4,085,272)</u>
<b>Cash flows from investing activities</b>		
Capital expenditures		
Additions to property and equipment	(10,188,677)	(19,998,147)
Bond Proceeds		
Proceeds used for PP&E, net	298,573	14,069,572
Endowment and other		
Purchase of investments	(32,065,173)	(684,725)
Sale of investments	22,244,000	21,247,000
Receivable for investments sold	(998,540)	(390,977)
Proceeds from the sale of investments designated for retiree and active medical plans	(1,229,951)	1,121,552
Net cash (used in) provided by investing activities	<u>(21,939,768)</u>	<u>15,364,275</u>
<b>Cash flows from financing activities</b>		
Repayments under debt agreement	(1,290,000)	(1,230,000)
Borrowing under line of credit	-	2,000,000
Repayments under line of credit	-	(2,000,000)
Contributions to be used for long-term investment	8,193,487	776,545
Net cash provided by (used in) financing activities	<u>6,903,487</u>	<u>(453,455)</u>
Net increase in cash and cash equivalents	10,936,270	10,825,548
<b>Cash and cash equivalents</b>		
Beginning of year	<u>34,435,028</u>	<u>23,609,480</u>
End of year	<u>\$ 45,371,297</u>	<u>\$ 34,435,028</u>
<b>Supplemental disclosures</b>		
Cash paid for interest	\$ 4,371,298	\$ 4,910,397
Noncash activity		
Construction in process additions remaining in accounts payable	484,706	1,285,418
Contributed securities	2,354,463	242,395
Donation of plant	9,500,000	-

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

# Woods Hole Oceanographic Institution

## Notes to Financial Statements

### December 31, 2022 and 2021

---

#### 1. Background

Woods Hole Oceanographic Institution (the "Institution") is a private, independent not-for-profit research and educational institution located in Woods Hole, Massachusetts. Founded in 1930, the Institution is dedicated to advancing knowledge of the ocean and its interaction with the Earth system through a sustained commitment to excellence in science, engineering, and education and to the application of this knowledge to problems facing society.

The Institution is a qualified tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code as it is organized and operated for education and scientific purposes.

#### 2. Summary of Significant Accounting Policies

##### **Basis of Presentation**

The accompanying financial statements have been prepared on the accrual basis and in accordance with accounting principles generally accepted in the United States of America.

The financial statements include certain prior-year summarized comparative information in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Institution's audited financial statements for the year ended December 31, 2021, from which the summarized information was derived.

Net assets, revenues, and realized and unrealized gains and losses are classified based on the existence or absence of donor-imposed restrictions and legal restrictions imposed under Massachusetts State law. Accordingly, net assets and changes therein are classified as follows:

##### **Net Assets With Donor Restrictions**

Donor-imposed restricted net assets are subject to donor-imposed stipulations that they be maintained by the Institution in perpetuity, or may or will be met by actions of the Institution and/or the passage of time. Generally, the donors of donor-restricted endowment funds permit the Institution to use all or part of the income earned and capital appreciation, if any, on related investments for general or specific purposes. Assets in an endowment fund are donor restricted assets until the Institution appropriates and spends such sums in accordance with the terms of the underlying endowment funds and in accordance with Massachusetts law, at which time they will be released to revenues without donor restrictions.

##### **Net Assets Without Donor Restrictions**

Net assets without donor restrictions are not subject to donor-imposed stipulations. Revenues are reported as increases in net assets without donor restrictions unless use of the related assets is limited by donor-imposed restrictions with the exception of certain investment expenses which are required to be netted against investment return. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor stipulations or law. Expirations of net assets with donor restrictions, that is, the donor-imposed stipulated purpose has been accomplished and/or the stipulated time period has elapsed, are reported as releases between the applicable classes of net assets. Amounts received for sponsored research are reflected in sponsored research revenue and released to operations when spent for the appropriate purpose, or as deferred revenue if expenditures have yet to be incurred.



# Woods Hole Oceanographic Institution

## Notes to Financial Statements

December 31, 2022 and 2021

---

### Contributions

Contributions, including promises to give, are recognized as revenues in the period received. Contributions subject to donor-imposed stipulations that are met in the same reporting period are reported as support without donor restrictions. Promises to give that are scheduled to be received after the balance sheet date or are subject to donor-imposed stipulations are shown as increases in net assets with donor restrictions and are released to net assets without donor restrictions when the purpose or restriction is met. Promises to give, subject to donor-imposed stipulations that the corpus be maintained in perpetuity, are recognized as increases in net assets with donor restrictions. Conditional promises to give are not recognized until the conditions on which they depend are substantially met. Contributions other than cash are generally recorded at market value on the date of the gift (or an estimate of fair value); although certain noncash gifts, for which a readily determinable market value cannot be established, are recorded at a nominal value until such time as the value becomes known. Contributed securities are sold immediately upon receipt. Contributions to be received after one year are discounted at the appropriate rate commensurate with risk. Amortization of such discount is recorded as additional contribution revenue in accordance with restrictions imposed by the donor on the original contribution, as applicable. Amounts receivable for contributions are reflected net of an applicable reserve for collectability.

The Institution reports contributions in the form of land, buildings, or equipment as operating support without donor restrictions at fair market value when received.

Dividends, interest and net gains on investments of endowment and similar funds are reported as follows:

- As increases in net assets with donor restrictions if the terms of the gift require that they be added to the principal of a donor restricted endowment fund;
- As increases in net assets with donor restrictions if the terms of the gift or relevant state law impose restrictions on the current use of the income or net realized and unrealized gains until they are appropriated for expenditure and/or the purpose restrictions are met; and
- As increases in net assets without donor restrictions in all other cases.

### Operations

The statement of activities reports the Institution's operating and nonoperating activities. Operating revenues and expenses consist of those activities attributable to the Institution's current annual research or educational programs, all gifts received, charter income, and a component of endowment income appropriated for operations (Note 3). Endowment investment income, gains and losses, from endowment funds without donor restrictions, over the amount appropriated under the Institution's spending plan are reported as nonoperating revenue (expense) as investment return (less than) in excess of amounts designated for sponsored research, education and current operations.

Nonoperating revenues (expenses) also include the change in value of split interest agreements, realized/unrealized (losses) gains on interest rate swaps, and the net periodic pension income (cost) on the noncontributory defined benefit pension plan that is not reimbursed through negotiated fixed rate agreements with the federal government. Additionally, nonoperating activities include redesignation of donor gifts, depreciation on certain government-funded facilities and pension related changes other than net periodic pension costs.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

As a result of an amendment to the postretirement health plan, in 2012 and forward, the Institution recognizes the return on investments designated for retiree and active medical plan expenses, and actual active and retiree medical expenses as nonoperating activities when these expenses are funded by withdrawals from the postretirement plan (Note 10).

**Cash and Cash Equivalents**

Cash and cash equivalents consist of cash, money market accounts, certificates of deposit and overnight repurchase agreements with initial maturities of three months or less when purchased which are stated at cost, which approximates market value.

The Institution has elected to treat all short-term highly liquid investments, (i.e., cash equivalents), embedded in pooled investments, investments designated for retiree and active medical plans and split interest agreements as short-term investments.

The Institution invests its cash and cash equivalents in money market funds at a financial institution which fully insures the balances held.

Included in restricted cash at December 31, 2022 and 2021, respectively, are advances received from the United States Navy, other U.S. Government and state agencies as well as contributions from donors who have restricted money for specific research initiatives. Interest earned on unspent funds from federal agencies is remitted to the federal government. Restricted cash also includes Board designated cash and is detailed in the table below:

	<b>2022</b>	<b>2021</b>
US Navy & Other Government Advances	\$ 29,122,976	\$ 22,907,253
Massachusetts Radiation Control	271,720	271,638
Board designated cash	<u>679,603</u>	<u>2,762,559</u>
Total cash, cash equivalents and restricted cash in the statement of cash flows	<u>\$ 30,074,299</u>	<u>\$ 25,941,450</u>

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the statements of financial position that sum to the total of the same such amounts presented in the statements of cash flows.

	<b>2022</b>	<b>2021</b>
Cash and cash equivalents, unrestricted	\$ 15,296,998	\$ 8,493,578
Cash and cash equivalents, restricted	<u>30,074,299</u>	<u>25,941,450</u>
Total cash, cash equivalents and restricted cash in the statement of cash flows	<u>\$ 45,371,297</u>	<u>\$ 34,435,028</u>

**Investments**

Investment securities are carried at market value and determined as follows: securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the year; securities traded in the over-the-counter market and listed securities for which no sales

# Woods Hole Oceanographic Institution

## Notes to Financial Statements

### December 31, 2022 and 2021

---

prices were reported on that day are valued at closing bid prices. The value of publicly traded securities or mutual funds are based upon quoted market prices and net asset values. Other investments, such as private equity funds, venture capital funds and hedge funds for which no such quotations or valuations are readily available, are carried at fair value as estimated by management using values provided by external investment managers. The Institution reviews and evaluates the valuations provided by investment managers and believes that these valuations are a reasonable estimate of fair value as of December 31, 2022 and 2021 but are subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market for the investments existed and such differences could be material.

Purchases and sales of investment securities are recorded on a trade date basis. Realized gains and losses are computed on a specific identification method. Investment income, net of investment expenses, is distributed on the unit method.

The Institution makes investments in funds that make direct investments in public securities, over the counter securities, and other securities which may or may not have readily available market prices. The Institution follows authoritative guidance under generally accepted accounting principles for estimating the fair value of investments in those funds that have calculated net asset value per share in accordance with the specialized accounting guidance for investment companies. Accordingly, the Institution uses the net asset value, (NAV) without further adjustment as a practical expedient to determine the fair value of these funds which (a) do not have a readily determinable fair value and (b) either have the attributes of an investment company or prepare their financial statements consistent with the measurement principles of an investment company. These values are reviewed and approved by the Institution.

#### **Investment Income Unitization**

The Institution's investments are pooled in an endowment fund and the investments and allocation of income are tracked on a unitized basis. The Institution distributes to operations for each individual fund an amount of investment income earned by each of the fund's proportionate share of investments based on a total return policy.

The Board of Trustees has appropriated all of the income and a specified percentage of the net appreciation (depreciation) to operations as prudent considering the Institution's long- and short-term needs, present and anticipated financial requirements, expected total return on its investments, price level trends, and general economic conditions. Under the Institution's current endowment spending policy, which is within the guidelines specified under state law, the Institution's annual operating budget should not exceed 5.0% of the Fund's (pooled investments) trailing 36 month rolling average market value. This amounted to \$21,247,000 and \$20,856,000 for the years ended December 31, 2022 and 2021, respectively, and is classified in operating revenues (research, education, and operations). The Institution is subject to the Massachusetts Uniform Prudent Management of Institutional Funds Act (UPMIFA) and, thus, classifies amounts in its donor-restricted endowment funds as net assets with donor restrictions because those net assets are time restricted until the Board of Trustees appropriates such amounts for expenditure. Most of those net assets also are subject to purpose restrictions that must be met before reclassifying those net assets to net assets without donor restrictions. The Board of Trustees has interpreted UPMIFA as not requiring the maintenance of purchasing power of the original gift amount contributed to an endowment fund, unless a donor stipulates the contrary. As a result of this interpretation, when reviewing its donor-restricted endowment funds the Institution considers a fund to be underwater if the fair value of the fund is less than the sum of (a) the original value of initial and subsequent gift amounts donated to the fund and (b) any accumulations to the fund that are required to be maintained in perpetuity in accordance with the direction of the applicable donor

# Woods Hole Oceanographic Institution

## Notes to Financial Statements

December 31, 2022 and 2021

---

gift instrument. The Institution has interpreted UPMIFA to permit spending from underwater funds in accordance with the prudent measures required under the law. From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor requires the Institution to retain as a fund of perpetual duration. Deficiencies of this nature exist in 4 donor-restricted endowment funds, which together have an original gift value of \$10,891,777, a current fair value of \$10,567,338, and a deficiency of \$324,439 as of December 31, 2022. These deficiencies resulted from unfavorable market fluctuations that occurred shortly after the investment of new contributions for donor-restricted endowment funds and continued appropriation for certain programs that was deemed prudent by the Board of Trustees. There were no underwater endowment funds at December 31, 2021.

### **Deposits with Trustees for Construction**

Deposits with trustees for construction consist principally of investments in United States Government obligations and have been deposited with trustees under certain loan agreements. These amounts are restricted for use on approved construction projects and facility improvements set forth under the Series 2018 Bond issue (see Note 8). At December 31, 2022 and 2021, \$1,573,237 and \$1,871,813 was available for these purposes.

### **Other Assets**

Other assets consist of investments held by various split-interest agreements, donated property, and, cash equivalents with a maturity date greater than ninety days.

### **Inventories**

Inventories are stated at the lower of cost or net realizable value. Cost is determined using the first-in, first-out method. Included in inventories are costs associated with the construction of engineered equipment under contracts totaling \$50,448 and \$1,609,767 for the years ended December 31, 2022 and 2021, respectively.

### **Contracts and Grants**

Revenue earned on grants for research is recognized as related costs are incurred. Revenue on contracts is recognized as value is transferred to customers, which is comparable to when related costs are incurred for research and research and development contracts. For engineered equipment contracts, revenue is recognized at a point in time when the equipment is delivered.

The Institution received 85% and 87% of its sponsored research revenues from government agencies including 49% and 45% of its operating revenues directly from the National Science Foundation and 13% and 21% from the United States Navy in fiscal years 2022 and 2021, respectively. Although applications for research funding to federal agencies historically have been funded, authorizations are subject to annual Congressional appropriations and payment.

### **Joint Program Revenue**

The Institution operates a joint graduate program in Oceanography with another institution under a memorandum of agreement. Tuition is charged to students per semester at agreed upon rates.

### **Other Income**

Included in other income is membership, royalty, and other ancillary income.

### **Deferred Financing Costs**

Costs incurred in connection with the placement of the MassDevelopment, Revenue Bonds, Woods Hole Oceanographic Institution Issue, Series 2018, have been deferred and are being amortized over the term of the obligation on a straight-line basis, which approximates the effective interest

# Woods Hole Oceanographic Institution

## Notes to Financial Statements

### December 31, 2022 and 2021

---

method. The unamortized portion of the deferred financing costs are included in the offset to long-term debt on the statement of financial position.

#### **Interest Rate Swap**

The Institution entered into an interest rate swap agreement (“SWAP”) on the MassDevelopment, Variable Rate Revenue Bonds, Woods Hole Oceanographic Institution Issue Series A Bonds in order to convert a portion of the variable rate debt to fixed rate, thereby economically hedging against changes in the cash flow requirements of the Institution’s variable rate debt obligations. The Series A bonds were retired on January 2, 2009. On October 28, 2022 the Institution terminated this SWAP agreement. Final payment of \$2,085,000 was paid in full with final settlement on this date.

#### **Property, Plant and Equipment**

Property, plant and equipment are stated at cost. Depreciation is provided on a straight-line basis at annual rates of 12 to 39 years on buildings and improvements, 10 to 15 years on vessels and dock facilities and 5 to 10 years on laboratory and other equipment. Depreciation expense on property, plant, and equipment purchased by the Institution in the amounts of \$13,260,646 and \$10,801,686 in 2022 and 2021, respectively, has been charged to operating activities. Depreciation on certain government-funded facilities (the Laboratory for Marine Science and the dock facility) amounting to \$51,936 and \$51,935 in 2022 and 2021, respectively, has been charged to nonoperating expenses as these assets were gifted by the Government.

#### **Leases**

The Institution leases portions of certain buildings to others under arrangements that are classified as operating leases. The term of these two agreements does not exceed five years. Income under these agreements totaled \$325,573 and \$339,816 for the years ended December 31, 2022 and 2021, respectively. Operating leases are included in right of use assets and lease liabilities in the Institution’s statement of financial position at December 31, 2022 and 2021.

#### **Expenses**

Expenses are recognized when incurred and charged to the functions to which they are directly related. Sponsored research includes general research, marine operations research and services and ship and submersible operation and usage. Academic programs costs are associated primarily with the Joint program. Unsponsored research includes internally funded research activities of the Institution. Other institutional activities include development, communications, marine operations support and other unsponsored activities.

Included in other institution activities are fund raising expenses totaling \$4,493,293 and \$4,391,269 for the years ended December 31, 2022 and 2021. Fund raising expenses totaled approximately 7% and 18% of revenue from contributions for the years ending December 31, 2022 and 2021. The calculation includes costs associated with the Institution’s Development Office, (including direct support activities) and the Contributions and gifts total presented on the statement of activities (excluding Contributions in kind).

#### **Use of Estimates**

The preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates.

# Woods Hole Oceanographic Institution

## Notes to Financial Statements

December 31, 2022 and 2021

---

### **New Accounting Pronouncements**

In November 2018, the FASB issued ASU 2018-18 Collaborative Arrangements (Topic 808). This guidance was issued to clarify the interaction between Topic 808 Collaborative Arrangements and Topic 606 Revenue from Contracts with Customers. The amendment is effective for fiscal year 2022 and the Institution has adopted this standard without a material impact on the financial statements.

In September 2020 The FASB issued ASU No. 2020-07 Not-for-Profit Entities (Topic 958) Presentation and Disclosures by Not-for-Profit Entities for Contributed Nonfinancial Assets. The guidance was issued to improve transparency of contributed nonfinancial assets for not-for-profit entities through enhancements to presentation and disclosure. The amendment is effective for fiscal year 2022 and the Institution has adopted this standard without a material impact on the financial statements.

In June 2016, The FASB issued ASU No.2016-13 Financial Instruments-Credit Losses (Subtopic) Measurement of Credit Losses on Financial Instruments. The amendments in this Update for the Institution are effective for the year ended December 31, 2023.

### **3. Investments**

The Institution has retained and outsourced services for manager selection, risk management and asset allocation of endowment assets to a third party. The assets transferred for investment under this arrangement, titled "Multi-strategy Investment Fund", represent holdings in the following classifications; Equity, Long/Short Equity, Real Assets, Commodities/Resources Credit/Special Situations, Absolute return, Fixed Income and Hedges/Opportunistic. These assets represent a concentrated investment in one investment manager. A consequence of this concentration is that the performance may be more favorably or unfavorably affected by the performance of the individual manager. The Institution invests in two separate sub-funds within the Multi-strategy Investment Fund. One sub-fund allows for annual withdrawals while the other allows for daily withdrawals with a notice of ten business days.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

The following table presents the classification and carrying value of investments at December 31:

	<b>Market</b>	
	<b>2022</b>	<b>2021</b>
<b>Assets</b>		
Cash and short-term investments	\$ 967,954	\$ 865,208
Multi-strategy Investment Funds -Short-term Liquidity Funds	23,844,212	22,894,698
Multi-strategy Investment Funds - WHOI Investment Holdings, LP	418,110,659	468,010,843
Total investments pooled	<u>442,922,825</u>	<u>491,770,749</u>
<b>Investments designated for retiree and active medical plans</b>		
Commingled funds	<u>9,396,946</u>	<u>12,268,952</u>
Total investments designated for retiree and active medical plans	<u>9,396,946</u>	<u>12,268,952</u>
Total assets at fair value	<u>\$ 452,319,771</u>	<u>\$ 504,039,701</u>

The following schedule summarizes the investment return and its classification in the statement of activities:

	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total 2022</b>
Change in unrealized depreciation	\$ (11,542,999)	\$ (47,865,479)	\$ (59,408,478)
Total return on investments	<u>(11,542,999)</u>	<u>(47,865,479)</u>	<u>(59,408,478)</u>
Investment return designated for			
Sponsored research	-	(7,627,470)	(7,627,470)
Education	-	(9,373,398)	(9,373,398)
Current operations	<u>(4,246,132)</u>	<u>-</u>	<u>(4,246,132)</u>
Total distributed to operations	<u>(4,246,132)</u>	<u>(17,000,868)</u>	<u>(21,247,000)</u>
Investment return in excess of amounts designated for sponsored research, education and current operations	<u>\$ (15,789,131)</u>	<u>\$ (64,866,347)</u>	<u>\$ (80,655,478)</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total 2021</b>
Change in unrealized appreciation	<u>\$ 12,548,499</u>	<u>\$ 50,958,381</u>	<u>\$ 63,506,880</u>
Total return on investments	<u>12,548,499</u>	<u>50,958,381</u>	<u>63,506,880</u>
Investment return designated for			
Sponsored research	-	(7,512,534)	(7,512,534)
Education	-	(9,211,971)	(9,211,971)
Current operations	<u>(4,131,495)</u>	<u>-</u>	<u>(4,131,495)</u>
Total distributed to operations	<u>(4,131,495)</u>	<u>(16,724,505)</u>	<u>(20,856,000)</u>
Investment return in excess of amounts designated for sponsored research, education and current operations	<u>\$ 8,417,004</u>	<u>\$ 34,233,876</u>	<u>\$ 42,650,880</u>

Net realized and unrealized (losses)/gains attributable to investments designated for retiree and active medical plans were \$(2,872,006) and \$877,245 for the years ended December 31, 2022 and 2021, respectively.

Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investments, it is at least reasonably possible that changes in the value of investment securities will occur in the near term and that such changes could materially affect the market values and the amounts reported in the statement of financial position.

**4. Fair Value Measurements**

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (also referred to as “exit price”). Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. In determining fair value, the use of various valuation approaches, including market, income and cost approaches, is permitted.

**Fair Value Hierarchy**

A fair value hierarchy has been established based on whether the inputs to valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the reporting entity’s assumptions about the inputs market participants would use. The fair value hierarchy requires the reporting entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The hierarchy is described below:

Level 1 Valuations using quoted prices in active markets for identical assets or liabilities. Valuations of these products do not require a significant degree of judgment. Level 1 assets and liabilities primarily include debt and equity securities that are traded in an active exchange market.



**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

**Level 2** Valuations using observable inputs other than Level 1 prices such as quoted prices in active markets for similar assets or liabilities; quoted prices for identical or similar assets or liabilities in markets that are not active; broker or dealer quotations; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

**Level 3** Valuations using unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Level 3 includes assets and liabilities whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques.

Inputs broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. As described in Note 2, the Institution generally uses the net asset value per share of the investment (or its equivalent) reported by the investee fund manager as the primary input to its valuation; however, adjustments to the reported amount may be made based on various factors.

Investments that are valued using the “practical expedient” or net asset value per share (“NAV”) are excluded from the fair value leveling hierarchy. Investments include private equity, venture capital, other limited partnerships and multi strategy funds.

The following tables summarize fair value measurements at December 31, 2022 and 2021 for financial assets and liabilities measured at fair value:

	<b>2022</b>				
	<b>Quoted Prices in Active Markets Level 1</b>	<b>Significant Other Observable Inputs Level 2</b>	<b>Significant Unobservable Inputs Level 3</b>	<b>NAV as Practical Expedient (NAV)</b>	<b>Total Fair Value</b>
<b>Assets</b>					
Cash and short-term investments	\$ 967,954	\$ -	\$ -	\$ -	\$ 967,954
Multi-strategy Investment Funds - Short-term Liquidity Funds	-	-	-	23,844,212	23,844,212
Multi-strategy Investment Funds - WHOI Investment Holdings, LP	-	-	-	418,110,659	418,110,659
Total pooled	967,954	-	-	441,954,871	442,922,825
Contributions receivable from remainder trust	-	-	823,813	-	823,813
Other assets	3,008,448	-	942,930	-	3,951,378
Investments designated for retiree and active medical plans - commingled funds	-	-	-	9,396,946	9,396,946
Total assets at fair value	<u>\$ 3,976,402</u>	<u>\$ -</u>	<u>\$ 1,766,743</u>	<u>\$ 451,351,817</u>	<u>\$ 457,094,962</u>
Total liabilities at fair value	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	2021				
	Quoted Prices in Active Markets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	NAV as Practical Expedient (NAV)	Total Fair Value
<b>Assets</b>					
Cash and short-term investments	\$ 865,208	\$ -	\$ -	\$ -	\$ 865,208
Multi-strategy Investment Funds - Short-term Liquidity Funds	-	-	-	22,894,698	22,894,698
Multi-strategy Investment Funds - WHOI Investment Holdings, LP	-	-	-	468,010,843	468,010,843
Total pooled	865,208	-	-	490,905,541	491,770,749
Contributions receivable from remainder trust	-	-	1,069,997	-	1,069,997
Other assets	3,004,524	-	1,057,618	-	4,062,142
Investments designated for retiree and active medical plans - commingled funds	-	-	-	12,268,952	12,268,952
Total assets at fair value	<u>\$ 3,869,732</u>	<u>\$ -</u>	<u>\$ 2,127,615</u>	<u>\$ 503,174,493</u>	<u>\$ 509,171,840</u>
Interest rate swap	<u>\$ -</u>	<u>\$ 6,489,981</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 6,489,981</u>
Total liabilities at fair value	<u>\$ -</u>	<u>\$ 6,489,981</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 6,489,981</u>

The Institution has adopted a policy that defines near-term liquidity as those investments allowing liquidity within 90 days of the reporting period.

The following table presents the assets and liability carried at fair value as of December 31, 2022 and 2021 that are classified within Level 3 of the fair value hierarchy defined above:

	2022	
	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	
	Contributions Receivable From Remainder	
	Trust	Other Assets
<b>Balance at January 1, 2022</b>	\$ 1,069,997	\$ 1,057,618
Settlements	-	-
New gifts	-	118,000
Unrealized gains	(246,184)	(232,688)
<b>Balance at December 31, 2022</b>	<u>\$ 823,813</u>	<u>\$ 942,930</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	<b>2021</b>	
	<b>Fair Value Measurements Using Significant Unobservable Inputs (Level 3)</b>	
	<b>Contributions Receivable From Remainder</b>	
	<b>Trust</b>	<b>Other Assets</b>
<b>Balance at January 1, 2021</b>	\$ 1,040,530	\$ 957,811
Settlements	-	(27,848)
New Gifts	-	100,000
Unrealized gains	<u>29,467</u>	<u>27,655</u>
<b>Balance at December 31, 2021</b>	<u>\$ 1,069,997</u>	<u>\$ 1,057,618</u>

The change in unrealized (loss)/gain related to Level 3 assets held as of December 31, 2022 and 2021 was \$(399,846) and \$187,556, respectively. These amounts are included in the line item "Changes in split interest agreements" in the statement of activities.

Contributions from Remainder Trusts and split interest agreements (included in the category "Other Assets") have stated interest rates and mortality estimates applied for discounting the future cash flows to the Institution for these arrangements. Interest rates and discount rates associated with establishing or recording these agreements are set at the date of gift and the current interest rate environment may be considerably different which affects the fair value calculation. Mortality (the expected length of time until the Institution received the settlement), is also an estimate impacting the fair value calculation. Actual results differing from these estimates in conjunction with deviations in interest rates directly impact the amount of gain or loss recorded in the Changes in split interest agreements in the statement of activities.

The fair market value of the investments described in the table below are based on net asset value per share of the investments as of December 31, 2022.

<b>Assets</b>	<b>Fair Value</b>	<b>Redemption Terms</b>	<b>Redemption Restrictions</b>
Multi-strategy Investment Funds			
Short-term liquidity funds	\$ 23,844,212	Monthly redemption terms	
Multi-strategy Investment Funds		Annual (year end), redemption terms	\$5,973,636 designated as illiquid remaining lives up to 5 years
WHOI Investment Holdings, LP	418,110,659		
Investments designated for retiree and active medical plans - commingled funds	<u>9,396,946</u>	Daily redemption terms	
Total investments	<u>\$ 451,351,817</u>		

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

The fair market value of the investments described in the table below are based on net asset value per share of the investments as of December 31, 2021.

<b>Assets</b>	<b>Fair Value</b>	<b>Redemption Terms</b>	<b>Redemption Restrictions</b>
Multi-strategy Investment Funds			
Short-term liquidity funds	\$ 22,894,698	Monthly redemption terms	
Multi-strategy Investment Funds		Annual (year end), redemption	\$10,423,789 designated as illiquid
WHOI Investment Holdings, LP	468,010,843	terms	remaining lives up to 5 years
Investments designated for retiree and active medical plans - commingled funds	12,268,952	Daily redemption terms	
Total investments	<u>\$ 503,174,493</u>		

**5. Pledges Receivable, Net**

Pledges that are expected to be collected within one year are recorded at their net realizable value. Pledges that are expected to be collected in future years are recorded at the present value of estimated future cash flows. Discount rates used to calculate the present value of pledges receivable ranged from 5.26% to 2.14% at December 31, 2022 and 2021.

Pledges receivable consist of the following at December 31:

	<b>2022</b>	<b>2021</b>
<b>Unconditional promises expected to be collected in</b>		
Less than one year	\$ 16,521,279	\$ 7,608,654
One year to five years	27,444,645	8,431,426
Reserve for uncollectible pledges receivable	(2,604,017)	(948,247)
Unamortized discount	<u>(2,352,304)</u>	<u>(251,214)</u>
	<u>\$ 39,009,603</u>	<u>\$ 14,840,619</u>

The total amount of conditional pledges which are not recognized in the Institution's financial statements were \$6,695,784 and \$6,731,066 for the years ended December 31, 2022 and 2021.

**6. Contribution Receivable From Remainder Trusts, Net and Other Split Interest Agreements**

Contributions receivable from remainder trusts at December 31, 2022 and 2021 were \$823,813 and \$1,069,997, respectively. In addition, the Institution is the beneficiary for split interest agreements held in gift annuity and pooled income funds totaling \$942,930 and \$1,057,618 for the years ended December 31, 2022 and 2021, respectively. These amounts are presented in other assets. Included in accounts payable and other liabilities are net expected payouts of \$571,236 and \$530,619 for the years ended December 31, 2022 and 2021, respectively. Contribution revenue for split interest agreements totaled \$0 for the years ended December 31, 2022 and 2021.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

The receivable and other split interest agreements and related revenues are measured at the present value of estimated future cash flows to be received, net of expected payouts, and recorded in the appropriate net asset category based on donor stipulation. During the term of these agreements, changes in the value are recognized based on amortization of discounts and changes in actuarial assumptions. Discount rates used in these calculations ranged from 4.74% to 4.72%, at December 31, 2022 and 2021.

**7. Deferred Fixed Rate Variance**

The Institution receives funding or reimbursement from federal government agencies for sponsored research under government grants and contracts. Revenue is recognized as related costs are incurred. The Institution has negotiated fixed rates with the federal government for the recovery of certain fringe benefits and indirect costs on these grants and contracts. Such recoveries are subject to carryforward provisions that provide for adjustments to be included in the negotiation of future fixed rates. The deferred fixed rate variance accounts represent the cumulative amount owed to or due from the federal government. The Institution's rates are negotiated with the Office of Naval Research (ONR), the Institution's cognizant agency.

The composition of the deferred fixed rate variance is as follows:

<b>Deferred fixed rate variance liability at December 31, 2020</b>	<u>\$ (1,445,663)</u>
2021 indirect costs	113,343,914
Amounts recovered	<u>(116,699,323)</u>
2021 change	<u>(3,355,409)</u>
<b>Deferred fixed rate variance liability at December 31, 2021</b>	<u>(4,801,072)</u>
2022 indirect costs	102,022,519
Amounts recovered	<u>(101,425,169)</u>
2022 change	<u>597,350</u>
<b>Deferred fixed rate variance liability at December 31, 2022</b>	<u>\$ (4,203,722)</u>

As of December 31, 2022, the Institution has expended a cumulative amount less than recovered amounts of \$4,203,722 which will be reflected as a deduction to future year recoveries. This amount has been reported as a liability of the Institution. Included in the Institution's rate agreements with their cognizant agency is a provision requiring full liquidation of any deferred rate variance generated in a specific year two years into the future as part of that year's rate calculation.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

**8. Line of Credit, Bonds Payable and Interest Rate Swap**

Indebtedness at December 31, 2022 and 2021 includes bonds issued through MassDevelopment. Balances of outstanding bonds payable at December 31 consist of the following:

	<b>2022</b>	<b>2021</b>
MassDevelopment, Series 2018, Fixed Rate Revenue Bond:\$	70,700,000	\$ 71,990,000
Add: Series 2018 unamortized bond premium	8,215,160	8,777,897
Less: Series 2018 unamortized bond discount	(205,692)	(213,811)
Deferred financing costs	(338,381)	(351,738)
	<u>78,371,087</u>	<u>80,202,348</u>
Bonds payable	<u>\$ 78,371,087</u>	<u>\$ 80,202,348</u>

In fiscal 2004, proceeds were received from the offering of the \$54,850,000 MassDevelopment, Variable Rate Revenue Bonds, Woods Hole Oceanographic Institution Issue, Series A (2004), (the "Series A Bonds"), which were used to repay the MassDevelopment B Pool loans and for campus construction completed in December 2007. The bonds contain certain restrictive covenants including limitations on obtaining additional debt, filings of annual financial statements and limitations on the creation of liens. In addition, the Institution agrees that, subject to any governmental restrictions, its fiduciary obligations and limitations imposed by law, it will maintain resources with and without donor restrictions at a market value equal to at least 75% of all outstanding indebtedness.

On December 1, 2008, the Institution issued \$65,000,000 MassDevelopment, Fixed Rate Revenue Bonds, Woods Hole Oceanographic Institution Issue, Series B (2008), (the "Series B Bonds"). The proceeds were used for major maintenance and renovation projects throughout the Institution and were used to retire the Series A Bonds. The Series B Bonds mature in 2034 and bear fixed interest rates from 4.0% to 5.5% payable on June 1 and December 1 beginning in 2009.

The Series B Bonds are collateralized by the Institution's revenues without donor restrictions. The Institution incurred costs of \$268,500 associated with the issue which have been capitalized and are being amortized over the life of the bonds. Debt covenants are consistent with the requirements under the Series A bond agreement as long as the interest rate swap agreement is in effect.

On May 9, 2018 the Institution issued \$75,510,000 MassDevelopment, Fixed Rate Revenue Bonds, Woods Hole Oceanographic Series 2018. The Institution received proceeds of \$86,306,214 net of issuance costs of \$644,296, which included underwriter's discount, legal, consulting and Issuer costs. Of this amount \$50,660,224 was used to retire the Series B (2008) obligations of outstanding principal and interest with the remaining amount held by trustees that will be drawn down to fund future maintenance and renovation projects throughout the Institution along with the building of new facilities. The Bonds mature in 2048 and bear a fixed interest rates ranging from 4.0% to 5%. The Series 2019 Bonds contain no financial covenants. Interest expense on the Bonds totaled \$3,004,513 and \$2,517,640, net of amounts capitalized of \$0 and \$533,865 for the years ended December 31, 2022 and 2021, respectively.

The Institution maintains two uncollateralized lines of credit with two separate banks. The lines of credit in the aggregate allow for a maximum borrowing capacity of \$45,000,000. One agreement,

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

with a maximum capacity of \$30,000,000, bears interest at 1% below the Wall Street Journal Prime Rate, contains no expiration date but is subject to annual reviews on or about September 30.

The Institution entered into a second line of credit with a new bank in 2022 upon the expiration of the former credit line. This new line of credit allows for borrowing with a maximum capacity of \$15,000,000 and bears interest at the current WSF Prime Rate minus 1%. The current Prime Rate is 3.25%. The agreement requires the Institution to open a deposit account and maintain a \$3,000,000 balance. The loan must be repaid in full for a minimum of thirty consecutive days annually. The Institution had no outstanding borrowings on the lines of credit at either December 31, 2022 or 2021, respectively.

The aggregate maturities due on the Series 2018 long-term debt at December 31, 2022 are as follows:

<b>Fiscal year</b>	<b>Principal Amount</b>
2023	\$ 1,360,000
2024	1,425,000
2025	1,500,000
2026	1,575,000
2027	1,660,000
Thereafter	63,180,000
	<u>\$ 70,700,000</u>

In June 2004, the Institution entered into an interest rate swap agreement on the Series A Bonds (subsequently refinanced to Series B Bonds) in order to convert a portion of the variable rate debt to fixed rate, thereby economically hedging against changes in the cash flow requirements of the Institution's variable rate debt obligations. The Institution terminated this SWAP on October 28, 2022 with a final payment of \$2,085,000.

The fair value of the interest rate swap at December 31, 2022 and 2021 is as follows:

	<u>Fair Value</u>	
	<u>2022</u>	<u>2021</u>
<b>Statement of financial position location</b>		
Accounts payable and other liabilities	\$ -	\$ 6,489,981

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

The effect of the interest rate swap on the statement of activities for 2022 and 2021 is as follows:

	<b>Amount of Loss Recognized in Statement of Activities</b>	
	<b>2022</b>	<b>2021</b>
<b>Location of loss recognized in statement of activities</b>		
Nonoperating income and expenses		
Net realized/unrealized (loss) / gain on interest rate swap	\$ (804,649)	\$ 857,135

**9. Retirement Plans**

The Institution maintains a noncontributory defined benefit pension plan covering certain employees of the Institution (Qualified Plan), and a supplemental benefit plan for certain other employees. Pension benefits are earned based on years of service and compensation received. The Institution's policy is to fund at least the minimum required by the Employee Retirement Income Security Act of 1974.

The Institution sponsors a 403(b) Defined Contribution Plan (DC Plan). Contributions for the defined contribution plan totaled \$8,626,581 and \$8,065,867 for the years ended December 31, 2022 and 2021, respectively. Effective January 1, 2010, no new participants were allowed to enter the Qualified Plan but were eligible to participate in the DC Plan. The Qualified Plan was placed under a soft freeze for current participants with all future retirement benefits being earned through the new DC Plan and prior benefits adjusted for future salary increases.



**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	<b>Qualified Plan Pension Benefits</b>	
	<b>2022</b>	<b>2021</b>
<b>Change in benefit obligation</b>		
Benefit obligation at beginning of year	\$ 302,724,290	\$ 328,727,200
Interest cost	10,207,523	9,497,794
Actuarial (gain)/loss	(75,801,408)	(7,565,873)
Benefits paid	(9,570,614)	(9,120,350)
Settlements	(13,912,386)	(18,814,481)
Transfers from other plans	333,197	-
Benefit obligation at end of year	<u>213,980,602</u>	<u>302,724,290</u>
<b>Change in plan assets</b>		
Fair value of plan assets at beginning of year	221,518,638	220,764,909
Employer contributions	3,300,000	14,200,000
Actual return on plan assets	(24,730,133)	14,488,560
Benefits paid	(9,570,614)	(9,120,350)
Settlements	(13,912,386)	(18,814,481)
Transfers from other plans	333,197	-
Fair value of plan assets at end of year	<u>176,938,702</u>	<u>221,518,638</u>
Funded status	<u>\$ (37,041,900)</u>	<u>\$ (81,205,652)</u>
<b>Amounts recognized in the statement of financial position consist of</b>		
Accrued benefit liability	<u>\$ 37,041,900</u>	<u>\$ 81,205,652</u>
Net amount recognized	<u>\$ 37,041,900</u>	<u>\$ 81,205,652</u>
<b>Amounts recognized in net assets without donor restrictions</b>		
Net actuarial loss	<u>\$ (242,242)</u>	<u>\$ 46,038,957</u>
<b>Information for pension plans with accumulated benefit obligations in excess of plan assets</b>		
Projected benefit obligation	\$ 213,980,602	\$ 302,724,290
Accumulated benefit obligation	<u>208,947,939</u>	<u>294,688,669</u>
	<u>\$ 422,928,541</u>	<u>\$ 597,412,959</u>
<b>Components of net periodic benefit cost</b>		
Service cost	\$ -	\$ -
Interest cost	10,207,523	9,497,794
Expected return on plan assets	(8,782,696)	(9,859,777)
Amortization of net actuarial loss	3,270,196	9,394,760
Settlements	-	-
Net periodic benefit cost	<u>\$ 4,695,023</u>	<u>\$ 9,032,777</u>
<b>Other changes in plan assets and benefit obligations recognized in unrestricted net assets</b>		
Amortization of net actuarial loss	\$ (3,270,196)	\$ (9,394,760)
Net actuarial gain/(loss)	(42,288,579)	(12,194,656)
Immediate recognition of loss due to settlements	<u>(722,424)</u>	<u>(2,775,614)</u>
Total recognized in nonoperating revenues (expenses)	<u>\$ (46,281,199)</u>	<u>\$ (24,365,030)</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

The Institution has reflected \$3,300,000 and \$14,200,000 for the years ended December 31, 2022 and 2021, respectively, in the operating section of the statement of activities which represents employer contributions reimbursed through the employee benefit fixed rate as negotiated with the United States Government. Any difference between the employer contributions and the net periodic benefit cost is recorded in the nonoperating section of the statement of activities. This difference amounted to expenses (income) of \$2,117,447 and \$(2,391,609) for the years ended December 31, 2022 and 2021, respectively.

	<b>Qualified Plan Pension Benefits</b>	
	<b>2022</b>	<b>2021</b>
<b>Weighted-average assumptions used to determine benefit obligations at December 31</b>		
Discount rate	5.60 %	3.05 %
Rate of compensation increase	8.50 %	3.50 %
<b>Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31</b>		
Discount rate	5.60 %	3.45 %
Expected long-term rate of return on plan assets	7.50 %	5.75 %
Rate of compensation increase	8.50 %	3.50 %

To develop the expected long-term rate of return on assets assumption, the Institution considered the current level of expected returns on risk-free investments (primarily government bonds), the historical level of the risk premium associated with the other asset classes in which the portfolio is invested and the expectations for future returns of each asset class. The expected return for each asset class was then weighted based on the target asset allocation to develop the expected long-term rate of return on assets assumption for the portfolio, net of expenses expected to be paid.

This resulted in a 7.50% and 5.75% assumption as of December 31, 2022 and 2021, respectively.

**Plan Assets**

The long-term investment objectives of the Plan are to (1) achieve an average real total return assessed over rolling five year periods, that is consistent with the Plan's actuarial assumptions; (2) generate acceptable long-term returns, as determined by measurement against the Fund's benchmarks and (3) generate acceptable long-term returns without compromising the liquidity and stability required to support the Plan's annual payments to the Plan's beneficiaries.

The Institution has retained and outsourced services for manager selection, risk management and asset allocation of the Plan's assets to a third party to assist with implementing the Plan's investment policy. In addition, Target Allocations for asset classes have been revised to include two broad categories; (1) Growth and Excess Return Portfolio, (2) Fixed Income/Liability Hedging Portfolio. These categories have been assigned a 60% and 40% Target Allocation, respectively.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

**Expected amounts amortized from net assets without donor restrictions into net periodic pension cost for the next fiscal year**

Amortization of net loss \$ 3,270,196

**Fair Value Disclosures**

The following fair value hierarchy table's present information about the Qualified Plan's financial assets measured at fair value on a recurring basis, (as described in Note 4).

	<b>2022</b>				<b>Total</b>
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>NAV as Practical Expedient</b>	
<b>Assets</b>					
Cash and cash equivalents	\$ 7,516,486				\$ 7,516,486
Private equity, venture capital and other limited partnerships				64,447,958	64,447,958
Commingled funds				24,846,663	24,846,663
Exchange traded funds	7,238,193				7,238,193
Hedge funds				51,136,091	51,136,091
Mutual funds	13,708,209				13,708,209
Domestic common stock	6,079,104				6,079,104
<b>Total assets at fair value</b>	<b>\$ 34,541,992</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 140,430,712</b>	<b>\$ 174,972,704</b>

	<b>2021</b>				<b>Total</b>
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>NAV as Practical Expedient</b>	
<b>Assets</b>					
Cash and cash equivalents	\$ 9,083,058				\$ 9,083,058
Private equity, venture capital and other limited partnerships				62,242,024	62,242,024
Commingled funds				34,590,794	34,590,794
Exchange traded funds	17,016,984				17,016,984
Hedge funds				65,200,714	65,200,714
Mutual funds	26,153,110				26,153,110
Domestic common stock	7,230,269				7,230,269
<b>Total assets at fair value</b>	<b>\$ 59,483,421</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 162,033,532</b>	<b>\$ 221,516,953</b>

Included in plan assets are net investment related (payables)/receivables of \$1,965,998 and \$1,685 as of December 31, 2022 and 2021, respectively. There were no transfers to or from Level 3 for the years ended December 31, 2022 and 2021.

The following unfunded commitments and redemption terms within the retirement trust are detailed below:

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	<b>2022</b>			
	<b>Fair Value</b>	<b>Unfunded Commitments</b>	<b>Redemption Frequency</b>	<b>Redemption Notice Period</b>
Private equity, venture capital and other limited partnerships	\$ 64,447,958	\$ 33,082,589	Restricted from Redemption	Restricted from Redemption
Commingled funds	24,846,663	-	Daily-Triennially	Business Day-90 Calendar Days
Hedge funds	<u>51,136,091</u>	<u>1,341,271</u>	Monthly-Triennially	17 Business Days - 4 Months
Total	<u>\$ 140,430,712</u>	<u>\$ 34,423,860</u>		

	<b>2021</b>			
	<b>Fair Value</b>	<b>Unfunded Commitments</b>	<b>Redemption Frequency</b>	<b>Redemption Notice Period</b>
Private equity, venture capital and other limited partnerships	\$ 62,242,024	\$ 36,820,870	Restricted from Redemption	Restricted from Redemption
Commingled funds	34,590,794	-	Daily-Triennially	Business Day-90 Calendar Days
Hedge funds	<u>65,200,714</u>	<u>979,500</u>	Monthly-Triennially	17 Business Days - 4 Months
Total	<u>\$ 162,033,532</u>	<u>\$ 37,800,370</u>		

**Expected Contributions**

The Institution anticipates contributing \$3,900,000 to the Qualified Plan in 2023.

**Estimated Future Benefit Payments**

The following benefit payments, which reflect expected future service are expected to be paid as follows:

<b>Years</b>	<b>Benefit Payments</b>
2023	\$ 16,446,880
2024	16,339,179
2025	16,416,600
2026	17,044,840
2027	15,977,210
2028–2032	74,173,133

**Amortization of Gains and Losses**

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value) is included as a component of net periodic benefit income (cost) for the year. If, as of the beginning of the year, that net gain or loss exceeds 10% of the greater of the projected benefit obligation and the market-related value of plan assets, the amortization is that excess divided by the average remaining service period until 25 years of service of participating employees expected to receive benefits under the plan.

**10. Other Postretirement Benefits**

In addition to providing retirement plan benefits, the Institution provides certain health care benefits for retired employees and their spouses. Substantially all of the Institution's employees may

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

become eligible for the benefits if they reach normal retirement age (as defined) or elect early retirement after having met certain time in service criteria.

Effective January 1, 2012 the Trust agreement which had been funding the Plan was amended to include active employees. Accordingly, assets of the Plan were then decoupled and recorded on the Institution's statement of financial position as investments designated for retiree and active medical plans along with a corresponding increase to the accrued postretirement liability. Actual returns from investments designated for retiree and active medical plans totaled gains/(losses) of (\$2,839,989) and \$975,827 for the years ended December 31, 2022 and 2021, respectively, and are presented in the nonoperating section of the statement of activities, net of administrative fees of \$32,017 and \$98,582 for 2022 and 2021, respectively. Health care benefits for active employees funded from these investments totaled \$0 for the years ended December 31, 2022 and 2021, and are also presented in the nonoperating section of the statement of activities.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	<b>Other</b>	
	<b>Postretirement Benefits</b>	
	<b>2022</b>	<b>2021</b>
<b>Change in benefit obligation</b>		
Benefit obligation at beginning of year	\$ 29,510,451	\$ 33,009,992
Service cost	304,679	359,594
Interest cost	880,861	922,262
Benefits paid, net of participant contributions	(1,229,951)	(1,121,552)
Actuarial (gain)/loss	<u>(8,944,607)</u>	<u>(3,659,845)</u>
Benefit obligation at end of year	<u>20,521,433</u>	<u>29,510,451</u>
<b>Change in plan assets</b>		
Fair value of plan assets at beginning of year	-	-
Employer contributions	1,229,951	1,121,552
Actual return on plan assets	-	-
Benefits paid, net of participant contributions	<u>(1,229,951)</u>	<u>(1,121,552)</u>
Fair value of plan assets at end of year	<u>-</u>	<u>-</u>
Funded status	<u>\$ (20,521,433)</u>	<u>\$ (29,510,451)</u>
<b>Amounts recognized in the statement of financial position consist of</b>		
Accrued benefit liability	<u>\$ 20,521,433</u>	<u>\$ 29,510,451</u>
Net amount recognized	<u>\$ 20,521,433</u>	<u>\$ 29,510,451</u>
<b>Amounts recognized in net assets without donor restrictions</b>		
Net prior service credit	\$ -	\$ -
Net actuarial (gain)/loss	<u>(8,298,064)</u>	<u>646,543</u>
Net amount recognized	<u>\$ (8,298,064)</u>	<u>\$ 646,543</u>
<b>Components of net periodic benefit cost</b>		
Service cost	\$ 304,679	\$ 359,594
Interest cost	880,861	922,262
Expected return on plan assets	-	-
Amortization of prior service credit	-	-
Amortization of net actuarial loss	-	121,007
Net periodic benefit cost	<u>\$ 1,185,540</u>	<u>\$ 1,402,863</u>
<b>Other changes in plan assets and benefit obligations recognized in net assets without donor restrictions</b>		
Amortization of prior service credit	\$ -	\$ -
Amortization of net actuarial loss	-	(121,007)
Net actuarial (gain)/loss	<u>(8,944,607)</u>	<u>(3,659,845)</u>
Total recognized in nonoperating expense (revenue)	<u>\$ (8,944,607)</u>	<u>\$ (3,780,852)</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

The Institution recognizes the net periodic benefit cost in the nonoperating section of the statement of activities. This amounted to \$880,861 and \$1,043,269 for the years ended December 31, 2022 and 2021, respectively.

	2022	2021
<b>Weighted-average assumptions used to determine benefit obligations at December 31</b>		
Discount rate	5.60 %	3.05 %
<b>Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31</b>		
Discount rate	3.05 %	2.85 %
Expected long-term rate of return on plan assets	N/A	N/A

The plan does not provide prescription drug benefits for post-65 retirees; therefore, there is no anticipated Medicare employer subsidy.

	2022		2021	
	Pre-65	Post-65	Pre-65	Post-65
<b>Assumed health care cost trend rates at December 31,</b>				
Health care cost trend rate assumed for next year	7.0 %	5.5 %	6.5 %	5.0 %
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.0 %	5.0 %	5.0 %	5.0 %
Year that the rate reaches the ultimate trend rate	2032	2026	2026	2026

**Expected Contributions**

The Institution provides contributions as expenses are incurred. The Institution expects contributions to the Retiree Medical Plan in 2022 to be equal to the expected benefit in 2023 of \$1,222,473.

**Estimated Future Benefit Payments**

The following benefit payments, which reflect expected future service are expected to be paid as follows:

<b>Years</b>	<b>Benefit Payments</b>
2023	\$ 1,222,473
2024	1,267,390
2025	1,290,845
2026	1,320,951
2027	1,350,466
2028–2032	6,888,903

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

**11. Net Assets**

The Institution's endowment consists of 161 individual funds established for a variety of purposes. The endowment includes both donor-restricted endowment funds and funds designed by the Board of Trustees to function as endowments. Net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

At December 31, the net asset composition by type consisted of the following:

	<b>2022</b>		
	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total</b>
<b>Endowment funds</b>			
Perpetual in nature	\$ -	117,473,774	\$ 117,473,774
Purpose restricted	-	262,149,677	262,149,677
Board designated funds	85,544,932	-	85,544,932
Endowment net assets	85,544,932	379,623,451	465,168,383
Purpose restricted - research	-	60,121,087	60,121,087
Purpose restricted - education	-	3,435,081	3,435,081
Time restricted and other	-	34,134,987	34,134,987
Pension and postretirement benefits	(48,166,748)	-	(48,166,748)
Undesignated	33,037,397	1,500,000	34,537,397
Total net assets	<u>\$ 70,415,581</u>	<u>\$ 478,814,607</u>	<u>\$ 549,230,188</u>
<b>2021</b>			
	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total</b>
<b>Endowment funds</b>			
Perpetual in nature	\$ -	\$ 109,269,734	\$ 109,269,734
Purpose restricted	-	302,373,594	302,373,594
Board designated funds	101,374,438	-	101,374,438
Endowment net assets	101,374,438	411,643,328	513,017,766
Purpose restricted - research	-	44,873,690	44,873,690
Purpose restricted - education	-	3,779,424	3,779,424
Time restricted and other	-	14,487,988	14,487,988
Pension and postretirement benefits	(98,447,152)	-	(98,447,152)
Undesignated	23,686,881	-	23,686,881
Total net assets	<u>\$ 26,614,167</u>	<u>\$ 474,784,430</u>	<u>\$ 501,398,597</u>

Changes in endowment net assets for the year ended December 31, consisted of the following:



**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

	<b>2022</b>		
	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total</b>
<b>Net assets beginning of year</b>	<u>\$ 101,374,438</u>	<u>\$ 411,643,327</u>	<u>\$ 513,017,766</u>
Investment return			
Net depreciation	<u>(11,542,999)</u>	<u>(47,865,479)</u>	<u>(59,408,478)</u>
Total investment return	<u>(11,542,999)</u>	<u>(47,865,479)</u>	<u>(59,408,478)</u>
New gifts	(608)	33,206,550	33,205,942
Appropriation of endowment assets for expenditure under spending policy	(4,246,132)	(17,000,868)	(21,247,000)
Additional appropriations, net	-	-	-
Change in split interest agreements	<u>(39,767)</u>	<u>(360,079)</u>	<u>(399,846)</u>
<b>Net assets end of year</b>	<u>\$ 85,544,932</u>	<u>\$ 379,623,451</u>	<u>\$ 465,168,383</u>

	<b>2021</b>		
	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total</b>
<b>Net assets beginning of year</b>	<u>\$ 92,913,790</u>	<u>\$ 376,444,055</u>	<u>\$ 469,357,845</u>
Investment return			
Net appreciation	<u>12,548,499</u>	<u>50,958,381</u>	<u>63,506,880</u>
Total investment return	<u>12,548,499</u>	<u>50,958,381</u>	<u>63,506,880</u>
New gifts	-	821,485	821,485
Appropriation of endowment assets for expenditure under spending policy	(4,131,495)	(16,724,505)	(20,856,000)
Additional appropriations, net	-	-	-
Change in split interest agreements	<u>43,645</u>	<u>143,911</u>	<u>187,556</u>
<b>Net assets end of year</b>	<u>\$ 101,374,438</u>	<u>\$ 411,643,327</u>	<u>\$ 513,017,766</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

**12. Liquidity and Availability of Financial Assets**

The Institution's financial assets available within one year of the balance sheet date for general expenditures are as follows:

	<b>2022</b>	<b>2021</b>
Cash and cash equivalents	\$ 15,296,998	\$ 8,493,578
Accounts receivable billed and unbilled	28,515,626	32,822,678
Receivable for investments sold	4,395,044	4,246,132
Pledges receivable	16,521,279	7,608,655
	<u>\$ 64,728,947</u>	<u>\$ 53,171,043</u>

The Institution's endowment funds consist of donor-restricted and Board designated funds. Income from donor-restricted funds are restricted by purpose and are not available for general expenditure. The Institution defines general expenditures as any costs included in total expenses from operating activities. As described in Note 2 the Board designated endowment has a spending rate of 5% and 5% will be available for general use within the next twelve months.

The Institution's liquidity management policy is to structure its financial assets to be available as its general expenditures, liabilities and other obligations come due. In addition, the Institution invests cash in excess of daily liquidity needs in short-term investments. To manage liquidity needs the Institution has committed lines of credit in the amount of \$45,000,000 (see Note 8). It is management's intent to extend and/or renew these lines of credit by September 30, 2023. In addition, the Institution has Board designated funds in the amount of \$85,544,932 which it could draw upon. At December 31, 2022, \$27,482,411 of designated net assets are committed to fund certain research, education and other designated net assets. Both Board designated and donor-restricted endowment contain investments with lock-up provisions that would reduce the total investments that could be available. The Institution's endowment investments include a multi strategy short-term liquidity fund to provide for additional short-term liquidity needs. This fund totaled \$23,844,212 at December 31, 2022 and allows for daily withdrawals (see Note 4 for redemption terms). Board designated funds are categorized as follows at December 31, 2022:

	<b>2022</b>	<b>2021</b>
Board designated for research	\$ 28,739,725	\$ 34,091,030
Board designated for research - Director discretionary	1,591,254	1,886,812
Board designated for general unsponsored program support	54,409,780	64,552,656
Other	804,173	843,940
	<u>\$ 85,544,932</u>	<u>\$ 101,374,438</u>

**13. Commitments and Contingencies**

The Defense Contract Audit Agency (DCAA) is responsible for auditing indirect charges to grants and contracts on behalf of the ONR. The Institution and the ONR have settled the years through 2020 with no findings or adjustments for unallowable costs.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

---

The Institution is a defendant in legal proceedings incidental to the nature of its operations. The Institution believes that the outcome of these proceedings will not materially affect its financial position.

**14. Related Party Transactions**

The Institution also has transactions such as professional services and other items with organizations where members of the Board of Trustees or Corporation are affiliated with the organizations. Total expenditures for these transactions were \$0 for the years ended December 31, 2022 and 2021.

The Institution has loans due from various employees for education advances and computer purchases. The amounts outstanding are \$713,080 and \$596,336 at December 31, 2022 and 2021, respectively.

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

**15. Schedule of Functional Expenses**

The statement of activities presents expenses by functional programs without distinguishing program versus supporting service expenses (or facilities and administrative (“F&A”) costs). F&A expenses totaled \$70,756,455 for 2022 and have been allocated among the categories presented utilizing a modified total direct cost (“MTDC”) basis. MTDC is a federal government prescribed methodology for allocating F&A costs. While facilities costs are allocated primarily on a square footage basis, administrative costs are allocated proportionally by the total of net direct costs per program plus the program’s share of facilities costs. Net program direct costs include total direct costs per program reduced by certain costs such as equipment, subcontracts (by statute) and other cost attributes negotiated with the Institution’s cognizant agency specific to the Institution which by nature would lead to a disproportional allocation of F&A costs. Functional expenses for the year ended December 31, 2022 and 2021 are as follows:

	<b>Research</b>	<b>Marine Operations</b>	<b>Academic Programs</b>	<b>Other Institution Activities</b>	<b>Un-sponsored Research</b>	<b>Ships and Submersibles</b>	<b>2022 Total</b>
Salaries	\$ 44,164,661	\$ 734,182	\$ 2,912,978	\$ 3,261,701	\$ 1,331,577	\$ 11,726,722	\$ 64,131,821
Fringe benefits	12,770,870	199,079	885,436	1,275,350	393,183	3,154,875	18,678,793
Equipment	19,378,482	963,942	9,195	104	834,707	1,302,859	22,489,289
Subcontracts	37,459,806	14,870	-	-	4,936	-	37,479,612
Supplies	8,953,266	149,419	77,224	83,092	140,601	2,152,245	11,555,847
Travel	3,343,578	78,230	122,710	186,377	82,890	763,316	4,577,101
Outside services	2,692,425	36,948	56,103	685,292	44,962	393,939	3,909,669
Interest	-	-	-	125	-	-	125
Professional services	339,013	-	-	371,775	-	47,024	757,812
Repairs and maintenance	1,091,296	738,435	-	60,447	960	1,689,389	3,580,527
Insurance	155,015	1,118	34,662	404,819	5,473	596,569	1,197,656
Other	20,790,940	3,762,925	8,343,805	8,222,915	4,901,581	3,999,723	50,021,889
Ship overhaul	-	57,630	-	-	-	-	57,630
Ships fuel	22,068	31,777	758	-	1,866	3,804,536	3,861,005
Facilities and administration	55,272,713	2,977,825	2,426,295	4,685,351	(2,425,040)	7,819,311	70,756,455
Total operating expenses	206,434,133	9,746,380	14,869,166	19,237,348	5,317,696	37,450,507	293,055,230
Nonoperating expense				(2,275,884)			(2,275,884)
	<u>\$ 206,434,133</u>	<u>\$ 9,746,380</u>	<u>\$ 14,869,166</u>	<u>\$ 16,961,464</u>	<u>\$ 5,317,696</u>	<u>\$ 37,450,507</u>	<u>\$ 290,779,346</u>

**Woods Hole Oceanographic Institution**  
**Notes to Financial Statements**  
**December 31, 2022 and 2021**

	Research	Marine Operations	Academic Programs	Other Institution Activities	Un-sponsored Research	Ships and Submersibles	2021 Total
Salaries	\$ 41,809,733	\$ 2,673,108	\$ 2,857,369	\$ 3,263,510	\$ 1,557,678	\$ 8,638,802	\$ 60,800,200
Fringe benefits	19,025,807	1,141,280	1,375,053	1,885,147	711,325	3,572,499	27,711,111
Equipment	14,004,721	2,307,797	413	295	282,148	119,245	16,714,619
Subcontracts	40,133,501	16,292	-	-	2,000	-	40,151,793
Supplies	8,315,211	1,104,553	56,480	102,528	189,349	1,731,980	11,500,101
Travel	1,592,725	412,233	36,132	47,278	26,043	473,475	2,587,886
Outside services	2,283,161	401,642	26,427	365,594	40,278	281,670	3,398,772
Interest	-	-	-	5,313	-	-	5,313
Professional services	146,786	81,073	-	287,275	-	-	515,134
Repairs and maintenance	1,396,404	17,973	-	105,053	4,490	1,155,850	2,679,770
Insurance	161,234	1,000	29,377	416,210	46,383	497,461	1,151,665
Other	17,965,669	2,701,001	7,771,363	783,118	8,024,870	1,998,272	39,244,293
Ship overhaul	-	16,223,171	-	-	-	-	16,223,171
Ships fuel	20,470	622,754	565	-	-	617,266	1,261,055
Facilities and administration	52,983,852	5,675,697	2,836,601	2,931,677	(658,369)	6,215,319	69,984,777
Total operating expenses	199,839,274	33,379,574	14,989,780	10,192,998	10,226,195	25,301,839	293,929,660
Nonoperating expense	-	-	-	4,123,954	-	-	4,123,954
	<u>\$ 199,839,274</u>	<u>\$ 33,379,574</u>	<u>\$ 14,989,780</u>	<u>\$ 14,316,952</u>	<u>\$ 10,226,195</u>	<u>\$ 25,301,839</u>	<u>\$ 298,053,614</u>

The category Facilities and Administration in the Schedule of Functional Expenses for the year ended December 31, 2022 includes costs associated with plant operations of \$24,694,606, departmental administration of \$13,236,876, sponsored program administration of \$2,156,246, library costs of \$1,241,152 and general administration of \$30,019,367. The category Facilities and Administration in the Schedule of Functional Expenses for the year ended December 31, 2021 includes costs associated with plant operations of \$23,560,006, departmental administration of \$13,430,504, sponsored program administration of \$1,435,365, library costs of \$1,337,041 and general administration of \$31,063,490.

**16. Subsequent Event**

Management evaluated all events or transactions that occurred after December 31, 2022 through July 14, 2023, the date these financial statements were issued. Subsequent to year end, the Institution committed to invest a total of \$4,000,000 in an investment fund beginning in 2023 through 2026.