Woods Hole Oceanographic Institution

Report on Federal Awards in Accordance with the Uniform Guidance December 31, 2021 EIN #042105850

Woods Hole Oceanographic Institution Index

December 31, 2021

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Report of Independent Auditors

To the Board of Trustees of Woods Hole Oceanographic Institution

Report on the Audit of the Financial Statements

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, 2021 and 2020, and the related statements of activities for the year ended December 31, 2021, and of cash flows for the years ended December 31, 2021 and 2020, 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, 2021 and 2020, and the changes in its net assets for the year ended December 31, 2021 and its cash flows for the years ended December 31, 2021 and 2020 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 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, 2020, 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 15, 2021, 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 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 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.

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. 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, in relation to the financial statements taken as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated July 19, 2022 on our consideration of the Institution'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 Institution's internal control over financial reporting and compliance.

Boston, Massachusetts

July 19, 2022

Woods Hole Oceanographic Institution Statements of Financial Position December 31, 2021 and 2020

2021	2020
Assets	
Cash and cash equivalents, unrestricted \$ 8,493,578 \$	808,665
Cash and cash equivalents, restricted 25,941,450	22,800,815
Billed accounts receivable (net of allowance for doubtful accounts of	0.000.000
\$75,014 for 2021 and \$114,177 for 2020) 6,089,322	6,963,990
Unbilled accounts receivable 26,733,356 Receivable for investments sold 21,247,016	28,281,621 20,856,039
Other receivables 797,178	559,801
Inventory 3,593,840	2,579,756
Deferred charges and prepaid expenses 5,086,180	4,411,461
Deposits with trustees for construction 1,871,813	15,941,385
Pledges receivable, net (Note 5) 14,840,619	10,072,597
Right of use asset 314,302	151,403
Investments designated for retiree and active medical plans (Note 3 & 10) 12,268,952	12,513,258
Investments, pooled (Note 3) 491,770,749	448,501,806
Other assets <u>4,162,144</u>	4,057,813
623,210,499	578,500,410
Property, plant and equipment	
Land, buildings and improvements 213,603,601	185,215,123
Vessels and dock facilities 15,784,863	14,723,313
Laboratory and other equipment 49,099,733	48,202,340
Construction in process 9,245,308	19,217,550
287,733,505	267,358,326
Accumulated depreciation (173,968,089)	(164,004,915)
Net property, plant and equipment 113,765,416	103,353,411
Contributions receivable from remainder trusts, long-term, net (Note 6) 1,069,997	1,040,530
Total assets \$ 738,045,912 \$	682,894,351
Liabilities	
Accounts payable and other liabilities (Note 8) \$ 25,343,840 \$	29,913,247
Accrued payroll and related liabilities 12,540,774	11,380,729
Deferred revenue and refundable advances 2,728,876 Deferred fixed rate variance (Note 7) 4,801,072	3,377,360 1,445,663
Right of use liability 4,801,072	151,403
Accrued postretirement liability (Note 10) 29,510,451	33,009,992
Accrued pension liability (Note 9) 81,205,652	107,962,291
Bonds payable (Note 8) 80,202,348	81,984,491
Total liabilities 236,647,315	269,225,176
Net assets	
Without donor restrictions 26,614,167	(14,585,094)
With donor restrictions 474,784,430	428,254,269
Total net assets 501,398,597	413,669,175
Total liabilities and net assets \$ 738,045,912 \$	682,894,351

Woods Hole Oceanographic Institution Statements of Activities Years Ended December 31, 2021 and 2020

	Without Donor Restrictions	With Donor Restrictions	2021	2020
Revenues				
Sponsored research				
Government	\$ 182,339,376	\$ -	\$ 182,339,376	\$ 161,898,614
Ships and submersibles operations	25,301,839	-	25,301,839	19,079,783
Subcontracts and nongovernment	24,506,969	34,285,673	58,792,642	47,559,865
Sponsored research assets released to operations	26,372,503	(26,372,503)	-	-
Fixed price awards	78,606	-	78,606	1,451,344
Education				
Joint program income	7,031,247	-	7,031,247	6,356,991
Endowment income	-	9,211,971	9,211,971	9,177,130
Education funds released from restriction	11,218,267	(11,218,267)	-	-
Education fees	122,591	45 455 040	122,591	42,594
Contributions and gifts	10,678,864	15,155,018	25,833,881	23,952,718
Contributions in kind Investment return designated for current operations	450,347 4,131,495	-	450,347 4,131,495	266,707 4,326,527
Releases from restrictions	4,131,493	(8,909,517)	(8,909,517)	(4,271,836)
Fees	1,579,728	(0,909,517)	1,579,728	1,114,137
Rental income	556,203	_	556,203	559,347
Communication and publications	463,226		463,226	219,797
Other	440,595	_	440,595	584,159
Total revenues	295,271,856	12,152,375	307,424,230	272,317,877
Expenses				
Research	199,839,274	_	199,839,274	174,422,941
Marine operations	33,379,574	_	33,379,574	32,132,479
Academic programs	14,989,780	_	14,989,780	13,484,866
Other Institution activities	10,192,998	_	10,192,998	8,794,738
Unsponsored research	10,226,195	-	10,226,195	14,151,738
Ships and submersibles	25,301,839	-	25,301,839	19,079,783
Total expenses	293,929,660	-	293,929,660	262,066,545
Change in net assets from operating activities	1,342,196	12,152,375	13,494,570	10,251,332
Nonoperating revenue and expenses Investment return greater than amounts designated				
for sponsored research, education and current operations	8,417,004	34,233,876	42,650,880	33,531,867
Return on investments for retiree and active medical plans	877,245	-	877,245	1,845,820
Net realized/unrealized (loss) on interest rate swap	857,135	-	857,135	(2,517,111)
Change in split interest agreements	43,645	143,911	187,556	113,418
Other nonoperating expenses	(51,935)	-	(51,935)	(69,876)
Gain/(loss) on sale of investment	219,749	-	219,749	(219,749)
Net periodic benefit cost	4,123,954	-	4,123,954	(1,287,527)
Pension and post-retirement related changes other than net periodic benefit costs (Note 9)	25,370,268	_	25,370,268	5,836,257
Change in net assets from nonoperating activities	39,857,065	34,377,787	74,234,852	37,233,099
Total change in net assets	41,199,261	46,530,162	87,729,422	47,484,431
Q	71,100,201	70,000,102	01,120,422	77,707,701
Net assets at	(44 505 000)	400.054.000	440 000 477	200 404 744
Beginning of year	(14,585,093)	428,254,268	413,669,175	366,184,744
End of year	\$ 26,614,168	\$ 474,784,430	\$ 501,398,597	\$ 413,669,175

Woods Hole Oceanographic Institution Statements of Cash Flows

Years Ended December 31, 2021 and 2020

Total change in net assets		2021	2020
Total change in net assets Series	Cash flows from operating activities		
Aguinemis to reconcise total change in net assets to net cash used in operating activities 10,081,162 10,081,163 1		\$ 87.729.422	\$ 47.484.431
Depreciation	· ·	, , , ,	, , , ,
Amonization (552,143) (580,208) (131,341) (131,341) (131,341) (131,341) (131,341) (131,341) (231,372,321) (231,372,372,321) (231,372,372,321) (231,372,372,321) (231,372,372,322,322,322,322,322,322,322,322	to net cash used in operating activities		
Change in split interest agreements	·		10,980,191
Allowance for uncollectible pledges			, ,
Discount on pedeges 145,893 23,732 Net realized and unrealized (gain) on investments (6,78,266) (58,847,20) Unrealized loss on interest swap (2,137,285) (1,245,686) Pension related changes other than net periodic pension costs (2,776,545) (1,666,929) Receipt of contributed securities (24,395) 312,304 Unreased decrease in assets 374,688 185,774 Rembursable costs and fees 374,688 185,774 Billed 374,688 185,776 Other receivable (227,377) 258,948 Urbilled (1,047,488) (1,097,167) Other receivable (3,023,23) (2,000,100) Pledges receivable (3,023,23) (2,000,000) Pledges receivable (3,043,000) (1,014,084) 490,987 Other assets (74,471) (3,007,000) (1,014,084) 490,987 Deferred charges and prepaid expenses (67,471) (3,007,000) (1,048,000) (1,048,000) (1,048,000) Romainder trusts (2,000,000) (2,000,000) (2,000,000)			
Net realized and unrealized (gain) on investments	. •		
Pursian related changes of the net periodic pension costs	· · · · · · · · · · · · · · · · · · ·		
Contributions to be used for long-term investment (776,54) (11, 20,4) Receipt of contributed securities (242,395) 312,304 (Increase) decrease in assets 312,304 Relimbursable costs and fees 874,668 165,777 Billed 1,548,285 (14,907,167) Other receivables (237,377) 258,944 Unbilled (1,014,084) 490,987 Pledges receivable (5,362,235) (5,060,03) Inventory (1,014,084) 490,987 Other assets (101,331) (301,94,04) Other assets (104,331) (3,019,409) Remainder trusts (2,067) (13,966) Remainder trusts (3,529,984) 5,120,976 Accrued pension and postretirement liabilities (3,529,984) 5,120,976 Accrued pension and postretirement liabilities (3,529,984) 5,120,976 Accrued payroll and related liabilities (3,529,984) 5,120,976 Accrued payroll and related liabilities (3,529,984) 5,120,976 Pollered fixed rate variance (2,987,025) <t< td=""><td>te de la companya de</td><td></td><td></td></t<>	te de la companya de		
Receipt of contributed securities (242,395 131,2304 Liquidation of contributed securities 242,395 13,2304 (Increase) decrease in assets Reimbursable costs and fees 18,250 14,568,265 14,071,677 Billed 1,548,265 (14,907,167) 258,944 Other receivables (227,377) 258,944 Pledges receivable (5,362,235) (2,806,103) Diversed of the part of the pa	Pension related changes other than net periodic pension costs	(25,370,268)	(5,836,257)
Clay	Contributions to be used for long-term investment	(776,545)	(1,666,929)
Reimbursable costs and fees	·	, , ,	, , ,
Reimbursable costs and fees	·	242,395	312,304
Billed 174,688 1,548,265 (14,907,167) Chibiled 1,548,265 (28,07,167) 258,944 Pledges receivable (237,377) 258,944 Pledges receivable (5,056,235) (2,060,103) Inventory (1,014,048) 490,987 Deferred charges and prepaid expenses (104,331) (3,018,408) Other assets (104,331) (3,018,408) Remainder trusts (29,467) (13,086) Increase (decrease) in liabilities (35,29,984) 51,20,979 Accoued pension and postretirement liability (35,29,984) 51,20,979 Accueud payroll and related iiabilities (35,29,984) 51,20,979 Accueud payroll and related relabilities (3,085,002) (3,085,002) Actific flows from investing activities (4,085,272) (24,025,331) Net cash used in operating activities (15,998,147) (23,987,032) Post flows from investing activities (4,085,572) (24,053,331) Proceeds used for PP&E, et (64,725) (4,085,572) (25,987,032) Endowment and other			
Unbilled 1,548, 255 (4,907,167) Other receivables (237,377) 258,944 Pledges receivable (5,562,235) (2,806,103) Inventory (1,104,804) 490,987 Deferred charges and prepaid expenses (674,719) (3,076,306) Other assets (29,467) (13,968) Remainder trusts (29,467) (13,968) Remainder trusts (29,467) (13,968) Accrued pension and postretirement liabilities (3,529,984) 5,120,979 Accrued payroll and related liabilities (3,355,998) 5,210,979 Accrued payroll and related liabilities (3,985,059) 2,045,234 Deferred frevenue and refundable advances (648,464) (677,275) Deferred fixed rate variance (3,985,069) 2,045,234 Deferred fixed prevailured of trust (1988) (3,987,022) 2,005,003 Actificate expenditures (1,998,147) (29,987,022) Poster fixed rate variance (1,998,147) (29,987,022) Additions to property and equipment (1,998,147) (29,987,022) <t< td=""><td></td><td>074.000</td><td>105 771</td></t<>		074.000	105 771
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Piedges receivable			
Inventory			
Contemp	<u> </u>		
Other assets (104,314) (3,019,440) Remainder trusts (29,467) (13,966) Increase (decrease) in liabilities (29,467) (13,966) Accound pension and postretirement liability (4,885,912) 647,178 Accounds payable and other liabilities (3,529,948) 5,120,979 Accured payroll and related liabilities (160,045) 2,048,324 Deferred fixed rate variance (648,484) (671,257) Deferred fixed rate variance (3,535,653) (3,535,653) Net cash used in operating activities (19,98,147) (23,987,032) Capital expenditures (19,98,147) (23,987,032) Additions to property and equipment (19,998,147) (23,987,032) Bond Proceeds (19,98,147) (23,987,032) Proceeds used for PP&E, net (14,669,572) 17,165,333 Endowment and other (84,725) (6,482,502) Purchase of investments (684,725) (6,482,502) Sale of investments (684,725) (33,564,002) Receivable for investments sold (39,007) (151,211)	,		*
Remainder trusts			
Increase (decrease) in liabilities (4,885,912) 647,178 Accrued pension and postretirement liabilities (3,529,984) 5,120,979 Accounts payable and other liabilities (1,160,045) 2,048,224 Deferred revenue and refundable advances (648,484) (671,257) Deferred fixed rate variance 3,355,409 (3,353,653) Net cash used in operating activities 3,355,409 (3,353,653) Sapital expenditures (19,998,147) (23,987,032) Additions to property and equipment (19,998,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Proceeds used for PP&E, net 14,069,572 17,165,333 Endowment and other 21,247,000 26,056,000 Purchase of investments sold (390,977) (151,211,552 Sale of investments sold (390,977) (151,211,552 983,495 Proceeds by from the sale of investments designated for retiree and active medical plans 1,28,64,275 13,584,085 Recyable for investments and of investments designated for retiree and active medical plans 1,23,600,000 10,170,000 Repayments under line of c			
Accounts payable and other liabilities 5,120,979 Accrued payroll and related liabilities 1,160,045 2,048,222 Deferred revenue and refundable advances (648,484) (671,257) Deferred fixed rate variance 3,355,409 (3,353,635) Not cash used in operating activities 4,085,272 (24,025,331) Cash flows from investing activities Captial expenditures Additions to property and equipment (19,98,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Endowment and other 14,069,572 17,165,333 Purchase of investments 21,247,000 26,066,000 Receivable for investments sold (390,977) (151,111) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,522 933,495 Net cash provided by investing activities 1,23,642,75 13,584,083 Net cash provided priments (2,000,000) 1 Expanyments under floet get activities (2,000,000) 1 Contributions to be used for long-term investment (2,000,000) 1	Increase (decrease) in liabilities	, ,	
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Deferred revenue and refundable advances (648,484) (671,257) Deferred fixed rate variance 3,355,409 (3,353,603) Net cash used in operating activities (4,085,272) (24,025,331) Cash flows from investing activities Capital expenditures Additions to property and equipment (19,98,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Proceds used for PP&E, net 14,069,572 17,165,333 Endowment and other (684,725) 66,842,505 Purchase of investments 21,247,000 26,056,000 Receivable for investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,215,252 983,495 Net cash provided by investing activities 15,364,275 15,364,003 Repayments under line of cridit (2,000,000) 1 Repayments under line of credit (2,000,000) 1 Repayments under line of credit (2,000,000) 1 Repayments under line of credit (2,000,000) 1 Repayme	Accounts payable and other liabilities	(3,529,984)	5,120,979
Deferred fixed rate variance 3,355,409 (3,353,653) Not cash used in operating activities 4,085,272 (24,025,331) Capital expenditures 2 Capital expenditures (19,998,147) (23,987,032) Additions to property and equipment (19,998,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Proceeds for PP&E, net (14,095,72) (17,165,333) Endowment and other (684,725) (64,822,502) Purchase of investments (21,247,000) 26,056,000 Sale of investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,21,252 983,495 Net cash provided by investing activities 1,26,275 383,495 Repayments under fine of credit (1,230,000) (1,170,000) Sepayments under fine of credit (2,000,000) - Repayments under fine of credit (2,000,000) - Repayments under fine of credit (2,000,000) - Contributions to be used for long-term investment 776,545 496,929<	• •	1,160,045	2,048,324
Net cash used in operating activities (4,085,272) (24,025,331) Cash flows from investing activities Capital expenditures Additions to property and equipment (19,998,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Proceeds used for PP&E, net 14,069,572 17,165,333 Endowment and other (6,847,25) (6,482,502) Purchase of investments 21,247,000 26,056,000 Receivable for investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,552 983,495 Net cash provided by investing activities 15,364,275 13,584,083 Proceeds from the sale of investments designated for retiree and active medical plans 1,121,552 983,495 Net cash provided by investing activities 15,364,275 13,584,085 Repayments under line of credit 2,000,000 1,170,000 Borrowing under line of credit (2,000,000 1 Contributions to be used for long-term investment (36,325,455) 496,929 Net cash provided by financing activities 23,609,481			, ,
Cash flows from investing activities Capital expenditures (19,998,147) (23,987,032) Additions to property and equipment (19,998,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Endowment and other (684,725) (6,482,502) Purchase of investments 21,247,000 26,056,000 Sale of investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,552 983,495 Net cash provided by investing activities 1,5364,275 13,584,083 Repayments under debt agreement (1,230,000) (1,170,000) Beparyments under line of credit 2,000,000 - Contributions to be used for long-term investment 2,000,000 - Contributions to be used for long-term investment (453,455) 496,929 Net cash provided by financing activities 23,609,480 33,553,799 Eginning of year 23,609,480 33,553,799 End of year 23,609,480 33,553,799 Exploremental disclosures 4,910,397 4,91	Deferred fixed rate variance	3,355,409	(3,353,653)
Capital expenditures (19,998,147) (23,987,032) Additions to property and equipment (19,998,147) (23,987,032) Bond Proceeds 14,069,572 17,165,333 Endowment and other (684,725) 17,165,333 Purchase of investments (684,725) (6,482,502) Sale of investments 21,247,000 26,056,000 Receivable for investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,522 983,495 Net cash provided by investing activities 1,230,000 (1,170,000) Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit 2,000,000 - Contributions to be used for long-term investment 2,000,000 - Contributions to be used for long-term investment 10,825,545 (1,666,292) Net cash provided by financing activities 24,634,555 (1,944,319) Net gray increase in cash and cash equivalents 10,825,548 (1,944,319) Eaginning of year 23,609,480 33,553,799	Net cash used in operating activities	(4,085,272)	(24,025,331)
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Proceeds used for PP&E, net 14,069,572 17,165,333 Endowment and other (684,725) (6,482,502) Purchase of investments 21,247,000 26,056,000 Sale of investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,552 983,495 Net cash provided by investing activities 15,364,275 13,584,083 Cash flows from financing activities Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit (2,000,000) - Repayments under line of credit (2,000,000) - Repayments under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 23,609,480 33,553,799 End of year 23,609,480 33,553,799 End of year 24,910,397 4,916,675 Cash paid for interest 4,910,397 4,916,6		(19,998,147)	(23,987,032)
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Purchase of investments (684,725) (6,482,502) Sale of investments 21,247,000 26,056,000 Receivable for investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,552 983,495 Net cash provided by investing activities 15,364,275 13,584,083 Cash flows from financing activities Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net (aberrase) increase in cash and cash equivalents 10,825,485 49,943,19 Cash and cash equivalents End of year 23,609,480 33,553,799 End of year 23,609,480 33,553,799 Supplemental disclosures Cash paid for interest 4,910,397 4,916,675 Noncash activity 20,808,480 23,609,480	, , , , , , , , , , , , , , , , , , ,	14,009,572	17,100,000
Sale of investments 21,247,000 26,056,000 Receivable for investments sold (390,977) (151,211) Proceeds from the sale of investments designated for retiree and active medical plans 1,121,552 983,495 Net cash provided by investing activities 15,364,275 13,584,083 Cash flows from financing activities (1,230,000) (1,170,000) Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Cash and cash equivalents 23,609,480 33,553,799 End of year 23,609,480 33,553,799 End of year \$4,910,397 \$4,916,675 Cash paid for interest \$4,910,397 \$4,916,675 Noncash activity 20,803,400 20,803,400 Construction in process additions remaining in accounts payable 1,285,418 290,803		(684.725)	(6.482.502)
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Net cash provided by investing activities 15,364,275 13,584,083 Cash flows from financing activities Cash flows from financing activities Cash flows from financing activities Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit (2,000,000) - Repayments under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Cash and cash equivalents 23,609,480 33,553,799 End of year 34,435,028 23,609,480 Supplemental disclosures \$4,910,397 4,916,675 Cash paid for interest \$4,910,397 4,916,675 Noncash activity Construction in process additions remaining in accounts payable 1,285,418 290,803	Receivable for investments sold	(390,977)	
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Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit 2,000,000 - Repayments under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Eaginning of year 23,609,480 33,553,799 End of year \$34,435,028 23,609,480 Supplemental disclosures \$4,910,397 4,916,675 Cash paid for interest \$4,910,397 4,916,675 Noncash activity 1,285,418 290,803	Net cash provided by investing activities	15,364,275	13,584,083
Repayments under debt agreement (1,230,000) (1,170,000) Borrowing under line of credit 2,000,000 - Repayments under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Eaginning of year 23,609,480 33,553,799 End of year \$34,435,028 23,609,480 Supplemental disclosures \$4,910,397 4,916,675 Cash paid for interest \$4,910,397 4,916,675 Noncash activity 1,285,418 290,803	Cash flows from financing activities		
Borrowing under line of credit 2,000,000 - Repayments under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Cash and cash equivalents 23,609,480 33,553,799 End of year \$34,435,028 23,609,480 Supplemental disclosures Cash paid for interest \$4,910,397 4,916,675 Noncash activity Construction in process additions remaining in accounts payable 1,285,418 290,803	<u> </u>	(1.230.000)	(1.170.000)
Repayments under line of credit (2,000,000) - Contributions to be used for long-term investment 776,545 1,666,929 Net cash provided by financing activities (453,455) 496,929 Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Cash and cash equivalents Beginning of year 23,609,480 33,553,799 End of year \$4,910,307 \$4,916,675 Supplemental disclosures Cash paid for interest \$4,910,397 \$4,916,675 Noncash activity Construction in process additions remaining in accounts payable 1,285,418 290,803		· · · · · · · · · · · · · · · · · · ·	(.,,,
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Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Cash and cash equivalents 23,609,480 33,553,799 End of year \$34,435,028 \$23,609,480 Supplemental disclosures \$23,609,480 \$23,609,480 Cash paid for interest \$4,910,397 \$4,916,675 Noncash activity \$4,910,397 \$4,916,675 Construction in process additions remaining in accounts payable 1,285,418 290,803	Contributions to be used for long-term investment		1,666,929
Net (decrease) increase in cash and cash equivalents 10,825,548 (9,944,319) Cash and cash equivalents 23,609,480 33,553,799 End of year \$34,435,028 \$23,609,480 Supplemental disclosures \$23,609,480 \$23,609,480 Cash paid for interest \$4,910,397 \$4,916,675 Noncash activity \$4,910,397 \$4,916,675 Construction in process additions remaining in accounts payable 1,285,418 290,803	Net cash provided by financing activities	(453,455)	496.929
Cash and cash equivalents Beginning of year 23,609,480 33,553,799 End of year \$ 34,435,028 \$ 23,609,480 Supplemental disclosures Cash paid for interest \$ 4,910,397 \$ 4,916,675 Noncash activity Tonstruction in process additions remaining in accounts payable 1,285,418 290,803			
Beginning of year 23,609,480 33,553,799 End of year \$34,435,028 \$23,609,480 Supplemental disclosures Cash paid for interest Noncash activity \$4,910,397 \$4,916,675 Noncash activity \$1,285,418 290,803			, , ,
Supplemental disclosures Cash paid for interest \$4,910,397 \$4,916,675 Noncash activity Construction in process additions remaining in accounts payable 1,285,418 290,803	•	23,609,480	33,553,799
Cash paid for interest \$ 4,910,397 \$ 4,916,675 Noncash activity Construction in process additions remaining in accounts payable \$ 1,285,418 \$ 290,803	End of year	\$ 34,435,028	\$ 23,609,480
Cash paid for interest \$ 4,910,397 \$ 4,916,675 Noncash activity Construction in process additions remaining in accounts payable \$ 1,285,418 \$ 290,803	Supplemental disclosures		
Noncash activity Construction in process additions remaining in accounts payable 1,285,418 290,803		\$ 4,910,397	\$ 4,916,675
Construction in process additions remaining in accounts payable 1,285,418 290,803	·	. , ,	. ,,
Contributed securities 242,395 312,304	•	1,285,418	290,803
	Contributed securities	242,395	312,304

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

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, 2020, 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, 2021 and 2020

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, 2021 and 2020

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, 2021 and 2020 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:

	2021	2020
US Navy & Other Government Advances	\$ 22,907,253	\$ 19,770,677
Massachusetts Radiation Control Board designated cash	271,638 2,762,559	271,052 2,759,086
Total cash, cash equivalents and restricted cash in the statement of cash flows	\$ 25,941,450	\$ 22,800,815

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.

	2021	2020
Cash and cash equivalents, unrestricted Cash and cash equivalents, restricted	\$ 8,493,578 25,941,450	\$ 808,665 22,800,815
Total cash, cash equivalents and restricted cash in the statement of cash flows	\$ 34,435,028	\$ 23,609,480

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 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, 2021 and 2020 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 shortterm 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 \$20,856,000 and \$20,698,000 for the years ended December 31, 2021 and 2020, 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

Woods Hole Oceanographic Institution

Notes to Financial Statements

December 31, 2021 and 2020

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 gift instrument. The Institution has interpreted UPMIFA to permit spending from underwater funds in accordance with the prudent measures required under the law. There were no underwater endowment funds at December 31, 2021 or 2020.

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, 2021 and 2020, \$1,871,813 and \$15,941,385 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 \$1,609,767 and \$1,099,184 for the years ended December 31, 2021 and 2020 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 87% and 88% of its sponsored research revenues from government agencies including 45% and 45% of its operating revenues directly from the National Science Foundation and 21% and 20% from the United States Navy in fiscal years 2021 and 2020, 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 method. The unamortized portion of the deferred financing costs are included in the offset to long-term debt on the statement of financial position.

Woods Hole Oceanographic Institution

Notes to Financial Statements

December 31, 2021 and 2020

Interest Rate Swap

The Institution entered into an interest rate swap agreement 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.

Net payments or receipts (difference between variable and fixed rate) under the swap agreement along with the change in fair value of the swap are recorded in nonoperating activities as net realized/unrealized (losses) gains on interest swap. The swap is carried at fair value and included in accounts payable and other liabilities in the statement of financial position.

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 \$10,801,686 and \$10,910,322 in 2021 and 2020, respectively, has been charged to operating activities. Depreciation on certain government-funded facilities (the Laboratory for Marine Science and the dock facility) amounting to \$51,935 and \$69,876 in 2021 and 2020, 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 \$339,816 and \$376,270 for the years ended December 31, 2021 and 2020 respectively. Operating leases are included in right of use assets and lease liabilities in the Institution's statement of financial position at December 31, 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 \$4,391,269 and \$4,013,517 for the years ended December 31, 2021 and 2020. Fund raising expenses totaled approximately 18% of revenue from contributions for the years ending December 31, 2021 and 2020. 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, 2021 and 2020

New Accounting Pronouncements

In August 2018, FASB issued ASU No. 2018-15, Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract. This guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software or software licenses. The amendment is effective for fiscal year 2021 and the Institution has adopted the standard without a material impact on the financial statements.

In November 2018 the FASB issued ASU 2018-18 Collaborative Arrangements (Topic 808). The amendments in this Update are intended to clarify transactions between collaborative arrangement participants and revenue from contracts with customers. The amendments in this Update for the Institution are effective for the year ended December 31, 2022.

In September 2020 the FASB issued ASU issued 2020-07, Presentation and Disclosures by Notfor-Profit Entities for Contributed Nonfinancial Assets, (Topic 958). The amendments in this update address improving transparency through enhancements to presentation and disclosure of nonfinancial assets recognized by Not-for-Profit entities. The amendments in this Update for the Institution are effective for the year ended December 31, 2022.

Reclassification

Certain prior year amounts have been reclassified to conform to current year presentation.

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.

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

	2021 Market	2020 Market
Assets		
Cash and short-term investments	\$ 865,208	\$ 595,775
Multi-strategy Investment Funds -Short-term Liquidity Funds	22,894,698	22,511,568
Multi-strategy Investment Funds - WHOI Investment Holdings, LP	468,010,843	425,394,463
Total investments pooled	491,770,749	448,501,806
Investments designated for retiree and active medical plans		
Commingled funds	12,268,952	12,513,258
Total investments designated for retiree		
and active medical plans	12,268,952	 12,513,258
Total assets at fair value	\$ 504,039,701	\$ 461,015,064

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

	Without Donor Restrictions	With Donor Restrictions	Total 2021
Change in unrealized appreciation	\$ 12,548,499	\$ 50,958,381	\$ 63,506,880
Total return on investments	12,548,499	50,958,381	63,506,880
Investment return designated for Sponsored research Education Current operations Total distributed to operations	(4,131,495) (4,131,495)	(7,512,534) (9,211,971) 	(7,512,534) (9,211,971) (4,131,495) (20,856,000)
•	(4,131,495)	(16,724,505)	(20,656,000)
Investment return in excess of amounts designated for sponsored research, education and current operations	\$ 8,417,004 Without Donor Restrictions	\$ 34,233,876 With Donor	\$ 42,650,880 Total 2020
	Restrictions	Restrictions	2020
Dividend interest and other income Change in unrealized appreciation	\$ 2,041 10,726,029	\$ 8,284 43,493,510	\$ 10,325 54,219,539
Total return on investments	10,728,070	43,501,794	54,229,864
Investment return designated for Sponsored research	_	(7,194,340)	(7,194,340)
Education Current operations Total distributed to operations Investment return in excess of amounts	(4,326,527) (4,326,527)	(9,177,130) 	(9,177,130) (4,326,527) (20,697,997)

Net realized and unrealized gains/(losses) attributable to investments designated for retiree and active medical plans were \$877,245 and \$1,845,820 for the years ended December 31, 2021 and 2020, 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.

Woods Hole Oceanographic Institution Notes to Financial Statements

December 31, 2021 and 2020

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.
- 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, 2021 and 2020 for financial assets and liabilities measured at fair value:

					2	021			
	Act	ted Prices in ive Markets Level 1		nificant Other ervable Inputs Level 2	Und	gnificant observable Inputs Level 3	NAV as Practical Expedient (NAV)		Total Fair Value
Assets									
Cash and short-term investments Multi-strategy Investment Funds - Short-term Liquidity Funds Multi-strategy Investment Funds - WHOI Investment Holdings, LP	\$	865,208 - -	\$	-	\$	-	\$ 22,894,698 468,010,843	\$	865,208 22,894,698 468,010,843
Total pooled		865,208		-		-	490,905,541		491,770,749
Contributions receivable from remainder trust Other assets Investments designated for retiree and active medical plans - commingled funds		3,004,524		-		1,069,997 1,057,618	- - 12.268.952		1,069,997 4,062,142 12,268,952
Total assets at fair value		3,869,732				2,127,615	503,174,493	_	509,171,840
Interest rate swap	-	-		6,489,981		-	-		6,489,981
Total liabilities at fair value	•		\$	6,489,981	\$		\$ 	\$	6,489,981
i otal liabilities at fall value	Ψ		<u> </u>	-,,	<u> </u>			Ť	
i otai ilabilities at fall value		ted Prices in ive Markets Level 1	Sign	nificant Other ervable Inputs Level 2	Si Uno	020 gnificant observable Inputs Level 3	NAV as Practical Expedient (NAV)		Total Fair Value
Assets Cash and short-term investments Multi-strategy Investment Funds - Short-term Liquidity Funds Multi-strategy Investment Funds - WHOI Investment Holdings, LP Total pooled		ive Markets	Sign	nificant Other	Si Uno	gnificant observable Inputs	\$ Practical Expedient	\$	
Assets Cash and short-term investments Multi-strategy Investment Funds - Short-term Liquidity Funds Multi-strategy Investment Funds - WHOI Investment Holdings, LP Total pooled Contributions receivable from remainder trust Other assets Investments designated for retiree and active medical plans -	Act	ive Markets Level 1 595,775 - -	Sign	nificant Other	20 Si Uno	gnificant observable Inputs	\$ Practical Expedient (NAV) 22,511,568 425,394,463 447,906,031	\$	595,775 22,511,568 425,394,463 448,501,806 1,040,530 3,957,947
Assets Cash and short-term investments Multi-strategy Investment Funds - Short-term Liquidity Funds Multi-strategy Investment Funds - WHOI Investment Holdings, LP Total pooled Contributions receivable from remainder trust Other assets	Act	595,775 - 595,775	Sign	nificant Other	20 Si Uno	gnificant observable Inputs Level 3	\$ Practical Expedient (NAV) 22,511,568 425,394,463	\$	595,775 22,511,568 425,394,463 448,501,806 1,040,530
Assets Cash and short-term investments Multi-strategy Investment Funds - Short-term Liquidity Funds Multi-strategy Investment Funds - WHOI Investment Holdings, LP Total pooled Contributions receivable from remainder trust Other assets Investments designated for retiree and active medical plans - commingled funds	Act	595,775 - 595,775 - 595,775 - 3,000,136	Sign	nificant Other	20 Si Uno	gnificant observable Inputs Level 3	\$ Practical Expedient (NAV) 22,511,568 425,394,463 447,906,031 12,513,258	\$	595,775 22,511,568 425,394,463 448,501,806 1,040,530 3,957,947 12,513,258

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, 2021 and 2020 that are classified within Level 3 of the fair value hierarchy defined above:

		20	021			
	Fair Value Measurements Using					
		Significant Unobservable Inputs (Lev				
	•	ontributions eivable From				
		nainder Trust	C	Other Assets		
Balance at January 1, 2021	\$	1,040,530	\$	957,811		
Settlements	•	-	*	(27,848)		
New Gifts		-		100,000		
Unrealized gains		29,467		27,655		
Balance at December 31, 2021	\$	1,069,997	\$	1,057,618		
		20	020			
		Fair Value Meas	sureme	nts Using		
	Sigı	nificant Unobser	vable Ir	nputs (Level 3)		
	_	ontributions				
		eivable From				
	Rer	nainder Trust	C	Other Assets		
Balance at January 1, 2020	\$	1,026,564	\$	938,371		
Settlements		-		(73,831)		
Unrealized gains		13,966		93,271		
Balance at December 31, 2020	\$	1,040,530	\$	957,811		

The change in unrealized gain/(loss) related to Level 3 assets held as of December 31, 2021 and 2020 was \$187,556 and \$113,418 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, 2021.

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

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, 2020.

Assets	Fair Value	Redemption Terms	Redemption Restrictions
Multi-strategy Investment Funds Short-term liquidity funds Multi-strategy Investment Funds WHOI Investment Holdings, LP	\$ 22,511,568 425,394,463	Monthly redemption terms Annual (year end), redemption terms	\$13,073,155 designated as illiquid remaining lives up to 5 years
Investments designated for retiree and active medical plans - commingled funds Total investments	12,513,258 \$ 460,419,289	Daily redemption terms	

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 0.94% to 2.26% at December 31, 2021 and 2020.

Pledges receivable consist of the following at December 31:

	2021		2020
Unconditional promises expected to be collected in			
Less than one year	\$ 7,608,654	\$	6,212,806
One year to five years	8,431,426		4,465,039
Reserve for uncollectible pledges receivable	(948, 247)		(500,017)
Unamortized discount	(251,214)	_	(105,231)
	\$ 14,840,619	\$	10,072,597

The total amount of conditional pledges which are not recognized in the Institution's financial statements totals \$6,731,066 and \$13,310,833 for the years ended December 31, 2021 and 2020.

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

Contributions receivable from remainder trusts at December 31, 2021 and 2020 were \$1,069,997 and \$1,040,530, respectively. In addition, the Institution is the beneficiary for split interest agreements held in gift annuity and pooled income funds totaling \$1,057,618 and \$957,811 for the years ended December 31, 2021 and 2020 respectively. These amounts are presented in other assets. Included in accounts payable and other liabilities are net expected payouts of \$530,619 and \$505,270 for the years ended December 31, 2021 and 2020 respectively. Contribution revenue for split interest agreements totaled \$0 and \$0 for the years ended December 31, 2021 and 2020 respectively.

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 4.72% to 6.0%, at December 31, 2021 and 2020.

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:

Deferred fixed rate variance asset at December 31, 2019	\$ (4,799,316)
2020 indirect costs Amounts recovered	104,571,206 (101,217,553)
2020 change	3,353,653
Deferred fixed rate variance asset at December 31, 2020	 (1,445,663)
2021 indirect costs Amounts recovered	113,343,914 (116,699,323)
2021 change	(3,355,409)
Deferred fixed rate variance asset at December 31, 2021	\$ (4,801,072)

As of December 31, 2021, the Institution has expended a cumulative amount less than recovered amounts of \$4,801,072 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.

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

Indebtedness at December 31, 2021 and 2020 includes bonds issued through MassDevelopment. Balances of outstanding bonds payable at December 31 consist of the following:

	2021	2020
MassDevelopment, Series 2018, Fixed Rate Revenue Bonds	\$ 71,990,000	\$ 73,220,000
Add: Series 2018 unamortized bond premium	8,777,897	9,351,517
Less: Series 2018 unamortized bond discount	(213,811)	(221,931)
Deferred financing costs	(351,738)	(365,095)
Bonds payable	\$ 80,202,348	\$ 81,984,491

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 \$2,517,640 and \$1,992,134, net of amounts capitalized of \$533,865 and \$1,097,679 for the years ended December 31, 2021 and 2020 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, 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 2021 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, 2021 or 2020, respectively.

The aggregate maturities due on the Series 2018 long-term debt at December 31, 2021 are as follows:

Fiscal Year	Principal Amount
2022	\$ 1,290,000
2023	1,360,000
2024	1,425,000
2025	1,500,000
2026	1,575,000
Thereafter	 64,840,000
	\$ 71,990,000

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 term of the swap is through June 1, 2034 and effectively locked in a fixed rate of 3.79% per annum. The agreement has a notional amount of \$45,725,000. Interest expense in association with the swap agreement totaled \$1,280,150 and \$1,222,547 which is reflected as part of the net realized/unrealized (losses) gains on interest rate swap at December 31, 2021 and 2020, respectively.

The fair value of the interest rate swap at December 31, 2021 and 2020 is as follows:

	 Fair Value		
	2021		2020
Statement of financial position location Accounts payable and other liabilities	\$ 6.489.981	\$	8,627,266

The effect of the interest rate swap on the statement of activities for 2021 and 2020 is as follows:

Amount of Loss Recognized					
in Statement of Activities					
2021	2020				

Location of loss recognized in statement of activities

Nonoperating income and expenses Net realized/unrealized (loss) on interest rate swap

\$ 857,135 \$ (2,517,111)

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 \$8,065,867 and \$8,844,554 for the years ended December 31, 2021 and 2020, 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.

		Qualifi Pension		
		2021		2020
Change in benefit obligation				
Benefit obligation at beginning of year	\$	328,727,200	\$	307,836,341
Interest cost		9,497,794		10,560,532
Actuarial (gain)/loss		(7,565,873)		25,574,417
Benefits paid		(9,120,350)		(15,334,885)
Settlements		(18,814,481)		-
Transfers from other plans				90,795
Benefit obligation at end of year		302,724,290		328,727,200
Change in plan assets				
Fair value of plan assets at beginning of year		220,764,909		192,848,643
Employer contributions		14,200,000		12,000,000
Actual return on plan assets		14,488,560		31,160,356
Benefits paid		(9,120,350)		(15,334,885)
Settlements		(18,814,481)		-
Transfers from other plans				90,795
Fair value of plan assets at end of year	_	221,518,638	_	220,764,909
Funded status	\$	(81,205,652)	\$	(107,962,291)
Amounts recognized in the statement of financial				
position consist of			_	
Accrued benefit liability	\$	81,205,652	\$	107,962,291
Net amount recognized	\$	81,205,652	\$	107,962,291
Amounts recognized in net assets without donor restrictions Net actuarial loss	\$	46,038,957	\$	70,403,987
	Ψ	40,000,007	Ψ	70,400,007
Information for pension plans with accumulated benefit obligations in excess of plan assets				
Projected benefit obligation	\$	302,724,290	\$	328,727,200
Accumulated benefit obligation	Ψ	294,688,669	Ψ	317,841,858
· ·	\$	597,412,959	\$	646,569,058
Components of net periodic benefit cost				, ,
Service cost	\$	_	\$	_
Interest cost	Ψ	9,497,794	Ψ	10,560,532
Expected return on plan assets		(9,859,777)		(9,418,496)
Amortization of net actuarial loss		9,394,760		11,061,103
Settlements				<u> </u>
Net periodic benefit cost	\$	9,032,777	\$	12,203,139
Other changes in plan assets and benefit obligations				
recognized in unrestricted net assets				
Amortization of net actuarial loss	\$	(9,394,760)	\$	(11,061,103)
Net actuarial gain/(loss)		(12,194,656)		3,832,557
Immediate recognition of loss due to settlements		(2,775,614)		
Total recognized in nonoperating revenues (expenses)	\$	(24,365,030)	\$	(7,228,546)

The Institution has reflected \$14,200,000 and \$12,000,000 for the years ended December 31, 2021 and 2020, 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 (income) expenses of (\$2,391,609) and \$203,139 for the years ended December 31, 2021 and 2020, respectively.

	Qualified Plan Pension Benefits		
	2021	2020	
Weighted-average assumptions used to determine benefit obligations at December 31			
Discount rate	3.05 %	2.85 %	
Rate of compensation increase	3.50 %	3.50 %	
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31			
Discount rate	3.45 %	3.55 %	
Expected long-term rate of return on plan assets	5.75 %	5.75 %	
Rate of compensation increase	3.50 %	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 5.75% assumption as of December 31, 2021 and 2020.

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.

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

Amortization of net loss \$ 9,394,760

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).

	2021									
		NAV as								
		Level 1		Level 2		Level 3	Pr	actical Expedient		Total
Assets										
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
Domestic fixed income		<u>-</u>				-		<u>-</u>		-
Total assets at fair value	\$	59,483,421	\$	-	\$	-	\$	162,033,532	\$	221,516,953

	2020									
		Level 1		Level 2		Level 3	Pra	NAV as ectical Expedient		Total
Assets										
Cash and cash equivalents	\$	8,314,472	\$	-	\$	-	\$	-	\$	8,314,472
Private equity, venture capital										
and other limited partnerships		-		-		-		38,093,930		38,093,930
Commingled funds		-		-		-		46,121,039		46,121,039
Exchange traded funds		21,122,943		-		-		-		21,122,943
Hedge funds		-		-		-		62,440,173		62,440,173
Mutual funds		35,248,162		-		-		-		35,248,162
Domestic common stock		7,488,965		-		-		-		7,488,965
Domestic fixed income				-		-			_	
Total assets at fair value	\$	72,174,542	\$	-	\$		\$	146,655,142	\$	218,829,684

Included in plan assets are net investment related (payables)/receivables of \$1,685 and \$1,935,224 as of December 31, 2021 and 2020, respectively. There were no transfers to or from Level 3 for the years ended December 31, 2021 and 2020.

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

					2021	
		Fair Value	C	Unfunded ommitments	Redemption Frequency	Redemption Notice Period
Private equity, venture capital and other limited partnerships Commingled funds Hedge funds	\$	62,242,024 34,590,794 65,200,714 162,033,532	\$	36,820,870 - 979,500 37,800,370	Restricted from Redemption Daily-Triennially Monthly-Triennially	Restricted from Redemption 1 Business Day-90 Calendar Days 17 Business Days - 4 Months
Total	Ψ	102,000,002	Ψ	37,000,370		
					2020	
		Fair Value		Unfunded ommitments	Redemption Frequency	Redemption Notice Period
Private equity, venture capital and other limited partnerships Commingled funds Hedge funds	\$	38,093,930 46,121,039 62,440,173	\$	39,417,887 - 3,775,500	Restricted from Redemption Daily-Triennially Monthly-Triennially	Restricted from Redemption 1 Business Day-90 Calendar Days 17 Business Days - 4 Months
Total	\$	146,655,142	\$	43,193,387		

Expected Contributions

The Institution anticipates contributing \$3,900,000 to the Qualified Plan in 2022.

Estimated Future Benefit Payments

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

Years	Benefit Payments
2022	\$ 20,613,416
2023	18,925,897
2024	18,285,699
2025	17,957,592
2026	18,281,016
2027–2031	81,424,610

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 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 \$975,827 and \$1,961,475 for the years ended December 31, 2021 and 2020, respectively, and are presented in the nonoperating section of the statement of activities, net of administrative fees of \$98,582 and \$115,655 for 2021 and 2020, respectively. Health care benefits for active employees funded from these investments totaled \$0 for the years ended December 31, 2021 and 2020, respectively, and are also presented in the nonoperating section of the statement of activities.

			her	
		Benefits		
		2021		2020
Change in benefit obligation Benefit obligation at beginning of year Service cost Interest cost Benefits paid, net of participant contributions Actuarial (gain)/loss	\$	33,009,992 359,594 922,262 (1,121,552) (3,659,845)	\$	31,173,664 343,146 1,084,388 (983,495) 1,392,289
Benefit obligation at end of year		29,510,451		33,009,992
Change in plan assets Fair value of plan assets at beginning of year Employer contributions Actual return on plan assets Benefits paid, net of participant contributions Fair value of plan assets at end of year	_	1,121,552 - (1,121,552)		983,495 - (983,495)
Funded status	\$	(29,510,451)	\$	(33,009,992)
Amounts recognized in the statement of financial position consist of Accrued benefit liability Net amount recognized	<u>\$</u>	29,510,451 29,510,451	\$	33,009,992 33,009,992
Amounts recognized in net assets without donor restrictions Net prior service credit Net actuarial loss Net amount recognized	\$	646,543 646,543	\$	4,427,395 4,427,395
Components of net periodic benefit cost Service cost Interest cost Expected return on plan assets Amortization of prior service credit Amortization of net actuarial loss	\$	359,594 922,262 - - 121,007	\$	343,146 1,084,388 - - -
Net periodic benefit cost	\$	1,402,863	\$	1,427,534
Other changes in plan assets and benefit obligations recognized in net assets without donor restrictions Amortization of prior service credit Amortization of net actuarial loss Net actuarial (gain)/loss Total recognized in nonoperating expense (revenue)	\$	(121,007) (3,659,845) (3,780,852)	\$	- - 1,392,289 1,392,289
	<u> </u>	, ,	<u> </u>	

The Institution recognizes the net periodic benefit cost in the nonoperating section of the statement of activities. This amounted to \$1,043,269 and \$1,084,388 for the years ended December 31, 2021 and 2020, respectively.

	2021	2020
Weighted-average assumptions used to determine benefit obligations at December 31 Discount rate	3.05 %	2.85 %
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31		
Discount rate	2.85 %	3.55 %
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.

	202	1	202	0
	Pre-65	Post-65	Pre-65	Post-65
Assumed health care cost trend rates at December 31,				
Health care cost trend rate assumed for next year	6.5 %	5.0 %	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	2026	2026	2026	2026

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plan. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

		20	21	2020				
	Point Incre	-Percentage- int Increase in Trend		One-Percentage- Point Decrease in Trend		One-Percentage- Point Increase in Trend		e-Percentage- int Decrease in Trend
Effect on total of service cost and interest cost components Effect on year-end postretirement benefit obligation	\$	-	\$	-	\$	289,691 5,481,689	\$	(223,003) (4,357,225)
Expected amounts amortize into net periodic pension of Amortization of net prior serva Amortization of net loss	cost for the				restri	ctions	\$	- 121,007

Expected Contributions

The Institution provides contributions as expenses are incurred. The Institution expects contributions to the Retiree Medical Plan in 2021 to be equal to the expected benefit in 2022 of \$1,259,550.

Estimated Future Benefit Payments

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

Years	Benefit Payments
2022	\$ 1,259,550
2023	1,327,037
2024	1,366,471
2025	1,363,720
2026	1,382,494
2027–2031	6,917,328

11. Net Assets

The Institution's endowment consists of 152 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:

	2021											
		thout Donor estrictions		With Donor Restrictions		Total						
Endowment funds												
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	\$	26,614,167	\$	474,784,430	\$	501,398,597						

		2020	
	Without Donor Restrictions	Total	
Endowment funds			
Perpetual in nature	\$ -	\$ 108,466,596	\$ 108,466,596
Purpose restricted	-	267,977,459	267,977,459
Board designated funds	92,913,790		92,913,790
Endowment net assets	92,913,790	376,444,055	469,357,845
Purpose restricted - research	-	37,060,521	37,060,521
Purpose restricted - education	-	5,676,820	
Time restricted and other	-	8,922,873	8,922,873
Pension and postretirement benefits	(128,459,026)	-	(128,459,026)
Undesignated	20,960,142	150,000	21,110,142
Total net assets	\$ (14,585,094)	\$ 428,254,269	\$ 413,669,175

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

				2021	
		ithout Donor Restrictions		With Donor Restrictions	Total
Net assets beginning of year	\$	92,913,790	\$	376,444,055	\$ 469,357,845
Investment return Net appreciation		12,548,499		50,958,381	 63,506,880
Total investment return		12,548,499		50,958,381	 63,506,880
New gifts Appropriation of endowment assets		-		821,485	821,485 -
for expenditure under spending policy Additional appropriations, net		(4,131,495) -		(16,724,505) -	(20,856,000)
Change in split interest agreements		43,645		143,911	 187,556
Net assets end of year	\$	101,374,438	\$ 411,643,328		\$ 513,017,766
				2020	
				2020	
		ithout Donor Restrictions		With Donor Restrictions	Total
Net assets beginning of year				With Donor	\$ Total 434,028,549
Net assets beginning of year Investment return Investment income, net of fees	Ī	Restrictions	ı	With Donor Restrictions	\$
Investment return	Ī	86,504,795	ı	With Donor Restrictions 347,523,754	\$ 434,028,549
Investment return Investment income, net of fees	Ī	86,504,795 2,041	ı	With Donor Restrictions 347,523,754 8,284	\$ 434,028,549
Investment return Investment income, net of fees Net appreciation Total investment return New gifts	Ī	86,504,795 2,041 10,726,029	ı	With Donor Restrictions 347,523,754 8,284 43,493,510	\$ 434,028,549 10,325 54,219,539
Investment return Investment income, net of fees Net appreciation Total investment return	Ī	86,504,795 2,041 10,726,029	ı	With Donor Restrictions 347,523,754 8,284 43,493,510 43,501,794	\$ 10,325 54,219,539 54,229,864
Investment return Investment income, net of fees Net appreciation Total investment return New gifts Appropriation of endowment assets for expenditure under spending policy	Ī	2,041 10,726,029 10,728,070	ı	8,284 43,493,510 43,501,794 1,684,014	\$ 10,325 54,219,539 54,229,864 1,684,014

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:

	2	2021	2020
Cash and cash equivalents	\$ 8	,493,578	\$ 808,665
Accounts receivable billed and unbilled	32	,822,678	35,245,611
Receivable for investments sold	4	,246,132	4,166,051
Pledges receivable	7	,608,655	6,211,227
	\$ 53	,171,043	\$ 46,431,554

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, 2022 into 2023. In addition, the Institution has Board designated funds in the amount of \$101,374,438 which it could draw upon. At December 31, 2021, \$25,273,393 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 \$22,894,698 at December 31, 2021 and allows for daily withdrawals (see Note 4 for redemption terms). Board designated funds are categorized as follows at December 31, 2021:

	2021	2020
Board designated for research	\$ 34,091,030	\$ 31,237,435
Board designated for research - Director discretionary	1,886,812	1,729,206
Board designated for general unsponsored program support	64,552,656	59,146,059
Other	843,940	 801,090
	\$ 101,374,438	\$ 92,913,790

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.

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 and \$0 for the years ended December 31, 2021 and 2020, respectively.

The Institution has loans due from various employees for education advances and computer purchases. The amounts outstanding are \$596,336 and \$591,082 at December 31, 2021 and 2020, respectively.

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 \$64,448,149 for 2019 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, 2019 and summarized information for 2018 are as follows:

	Research	Marine Operations	Academic Programs	Other Institution Activities	Unsponsored 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
Utilities	-	-	-	-	-	-	-
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			<u> </u>	4,123,954	<u> </u>	<u> </u>	4,123,954
Total	\$ 199,839,274	\$ 33,379,574	\$ 14,989,780	\$ 14,316,952	\$ 10,226,195	\$ 25,301,839	\$ 298,053,614

	Research	,	Marine Operations	Academic Programs	Other Institution Activities	nsponsored Research	Ships and ubmersibles	2020 Total
Salaries	\$ 36,720,907	\$	3,548,550	\$ 2,722,697	\$ 3,165,232	\$ 3,127,056	\$ 6,222,792	\$ 55,507,234
Fringe Benefits	15,751,191		1,466,062	1,221,363	1,731,275	1,375,228	2,399,944	23,945,063
Equipment	10,334,585		2,261,659	-	8,075	247,601	7,854	12,859,774
Subcontracts	29,471,975		-	-	-	14,583	-	29,486,558
Supplies	8,694,150		756,790	63,572	99,418	146,603	804,338	10,564,871
Travel	1,226,710		448,227	69,738	53,977	75,401	239,316	2,113,369
Outside Services	3,113,050		262,798	57,279	367,484	89,970	264,460	4,155,041
Utilities	-		-	-	-	-	-	-
Interest	-		-	-	-	-	-	-
Professional Services	238,224		34,462	-	150,024	-	2,290	425,000
Repairs and Maintenance	1,196,100		44,820	723	44,177	25,854	1,084,304	2,395,978
Insurance	66,248		2,301	24,826	380,142	33,324	428,511	935,352
Other	20,454,584		1,583,213	6,765,235	265,936	8,212,017	1,745,091	39,026,076
Ship Overhaul	-		17,799,467	-	-	-	-	17,799,467
Ships Fuel	13,814		349,272	-	-	309	1,151,071	1,514,466
Facilities and Administration	 47,145,494		3,574,859	 2,559,434	2,524,905	803,793	 4,729,811	61,338,296
Total operating expenses	174,427,032		32,132,480	13,484,867	8,790,645	14,151,739	19,079,782	262,066,545
Nonoperating expense	 -		-	 -	 (1,287,527)	 	 -	 (1,287,527)
Total	\$ 174,427,032	\$	32,132,480	\$ 13,484,867	\$ 7,503,118	\$ 14,151,739	\$ 19,079,782	\$ 260,779,018

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. The category Facilities and Administration in the Schedule of Functional Expenses for the year ended December 31, 2020 includes costs associated with plant operations of \$21,898,155, departmental administration of \$11,972,680, sponsored program administration of \$1,233,489, library costs of \$1,313,756 and general administration of \$26,614,238.

Woods Hole Oceanographic Institution Notes to Financial Statements December 31, 2021 and 2020

16. Subsequent Event

Management evaluated all events or transactions that occurred after December 31, 2021 through July 19, 2022, the date these financial statements were issued and has concluded that there were no such events or transactions that require adjustment to the audited financial statements or disclosure in the notes to the audited financial statements.

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listing Number	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Research and Development Cluster							
Department of Agriculture (USDA)							
United States Department of Agriculture (USDA)							
Grants For Agricultural Research, Special Research Grants	10.200		\$ 3,690	University of Rhode Island	0008364/02152021	\$ 3,690	
Grants For Agricultural Research, Special Research Grants	10.200		21,100	Roger Williams University	20163850025754	21,100	
SURV DIAGNOSTIC 092520 ACMS128916507	10.RD		15,960	Roger Williams University	0041472	15,960	
Subtotal Department of Agriculture	-	-	40,750			40,750	
Department of Commerce							
National Oceanic and Atmospheric Administration (NOAA)							
Ocean Exploration	11.011	767,740				767,740	62,732
Integrated Ocean Observing System (IOOS)	11.012	229,903				229,903	103,001
Integrated Ocean Observing System (IOOS)	11.012		54,882	Alaska Ocean Observing System	H2400 62	54,882	
Integrated Ocean Observing System (IOOS)	11.012		1,675	University of Delaware	UDR0000083	1,675	
Integrated Ocean Observing System (IOOS)	11.012		10,787	University of Maine	5100600786	10,787	
Integrated Ocean Observing System (IOOS)	11.012		39,643	Northeastern Regional Association of Coastal Ocean Observing	N21A013021	39,643	
Integrated Ocean Observing System (IOOS)	11.012		181,419	Northeastern Regional Association of Coastal Ocean Observing	A008-009	181,419	
Integrated Ocean Observing System (IOOS)	11.012		2,928	Rutgers University	SUB 6169 642525	2,928	
Integrated Ocean Observing System (IOOS)	11.012		5,025	Northeastern Regional Association of Coastal Ocean Observing	N21A013020	5,025	
Integrated Ocean Observing System (IOOS)	11.012		8,068	University of Maine	5100579931	8,068	
Integrated Ocean Observing System (IOOS)	11.012		1,253	University of Maine	5100579996	1,253	
Broad Agency Announcement	11.015		64,085	Maine Center for Coastal Fisheries	AGREEMENT	64,085	
Ocean Acidification Program (OAP)	11.017	6,508				6,508	
NOAA Small Business Innovation Research (SBIR) Program	11.021		1,089	Coastal Ocean Vision	PO2082	1,089	
Sea Grant Support	11.417	2,268,752				2,268,752	712,469
Sea Grant Support	11.417		1,987	State University of New York	80794/3 1158304	1,987	1,987
Sea Grant Support	11.417		49,428	University of Maine	UMS1231	49,428	
Sea Grant Support	11.417		6,509	University of Connecticut	364469	6,509	6,509
Sea Grant Support	11.417		79,841	Massachusetts Institute of Technology	S4610 PO 563096	79,841	
Sea Grant Support	11.417		8,250	University of Maine	PO 5100576371	8,250	
Sea Grant Support	11.417		33,985	University of Connecticut	368912	33,985	25,992
Coastal Zone Management Administration Awards	11.419		19,418	University of Oregon	290550C	19,418	
Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program	11.427	8,892				8,892	
Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program	11.427		78,318	Ward Aquaforms LLC	PO 27504	78,318	
Marine Sanctuary Program	11.429	15,733				15,733	
Marine Sanctuary Program	11.429		9	National Marine Sanctuary Foundation	1811B203	9	
Marine Sanctuary Program	11.429		33,309	National Marine Sanctuary Foundation	1910B235	33,309	
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Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listing Number	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Climate and Atmospheric Research	11.431	1,320,371				1,320,371	156,497
National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	11.432	11,546,923				11,546,923	2,440,730
National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	11.432		1,525,900	University of Rhode Island	0007525 102212019WHOI	1,525,900	48,056
Unallied Management Projects	11.454		34,824	University of Massachusetts Dartmouth	25739	34,824	24,403
Hydrologic Research	11.462		987	University Corporation for Atmospheric Research	P2016388	987	7
Center for Sponsored Coastal Ocean Research Coastal Ocean Program	11.478	1,013,660				1,013,660	255,188
Center for Sponsored Coastal Ocean Research Coastal Ocean Program	11.478		90,634	Virginia Institute of Marine Science	722374 712684	90,634	1
Center for Sponsored Coastal Ocean Research Coastal Ocean Program	11.478		32,196	University of Rhode Island	0008460 02042021	32,196	6
Center for Sponsored Coastal Ocean Research Coastal Ocean Program	11.478		50,933	University of California San Diego	704101	50,933	3
Center for Sponsored Coastal Ocean Research Coastal Ocean Program	11.478		22,762	Florida Gulf Coast University	17024 WHOI 001	22,762	2
Educational Partnership Program	11.481		1,755	Texas A&M University	PO AB0617767	1.755	5
MC2954	11.RD	1,047	.,	· · · · · · · · · · · · · · · · · · ·		1,047	
Subtotal Department of Commerce	•	17,179,529	2,441,899			19,621,428	
Department of Defense	•						
Department of the Navy, Office of the Chief of Naval Research							
Basic and Applied Scientific Research	12.300	24,589,215				24,589,215	577,144
Basic and Applied Scientific Research	12.300		36,266	University of Texas at Austin	PO 2022C00535	36,266	3
Basic and Applied Scientific Research	12.300		71,745	University of California San Diego	PO PUR00040437	71,745	5
Basic and Applied Scientific Research	12.300		10,260	University of Washington	UWSC10595	10,260)
Basic and Applied Scientific Research	12.300		306,060	University of California San Diego	703459	306,060)
Basic and Applied Scientific Research	12.300		18,802	Carnegie Mellon University	1140217 443508	18,802	2
Basic and Applied Scientific Research	12.300		15,413	University of California San Diego	704512	15,413	3
Basic and Applied Scientific Research	12.300		23,153	University of St. Andrews	Agreement 18390	23,153	
Basic and Applied Scientific Research	12.300		52,576	University of California San Diego	PO 92198889	52,576	
Basic and Applied Scientific Research	12.300		16,253	University of California San Diego	PO PUR00299328	16,253	
N0001417C7006	12.RD	1,301,544				1,301,544	
N0001417C7026	12.RD	1,191				1,191	
N0001417L0354	12.RD	13,946,065				13,946,065	
N0001418C2036	12.RD	3,567,958				3,567,958	, ,
N0001419C2016	12.RD	1,271,160				1,271,160	
N0001420C2053	12.RD	3,927,953				3,927,953	
N0001421C2028	12.RD	528,803				528,803	
N6133121D0004	12.RD	71,797				71,797	
N6660414D0344	12.RD	1,348,752				1,348,752	
N6660418DC828	12.RD	4,234,000				4,234,000)
H9245020D0010	12.RD		8,939	University of California San Diego	Credit Card	8,939)

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listing Number	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
N000141712747	12.RD		15,182	University of Michigan	PO 3005990278	15,18	2
N0001420C2039	12.RD		19	University of California, San Diego	VISA	1	9
N0002410D6318	12.RD		275,337	University of Washington	UWSC12118	275,33	
N0002417D6421	12.RD		12,840	University of Texas at Austin	PO 2021A30201	12,84	
N0002418D6401	12.RD		39,724	Pennsylvania State University	S22 07	39,72	
N00024D6421	12.RD		18,285	University of Texas at Austin	PO 2021C00500	18,28	5
N3943016C1863	12.RD		22,588	University of Michigan	PO 3005990278	22,58	8
N6523618C8009	12.RD		2,175,379	General Dynamics Mission Systems, Inc.	19SC0050	2,175,37	9
N6523618C8009	12.RD		2,048	Raytheon BBN Technologies Corporation	PO 4202386376	2,04	8
N6600120C4005	12.RD		382,214	Applied Physical Sciences Corporation	APS2004	382,21	4
N6660411D0165	12.RD		14,002	Hydroid Inc.	PO00065122	14,00	2
N6833517C0553	12.RD		212,816	Heat, Light and Sound Research, Inc.	Agreement	212,810	6
N6833520C0624	12.RD		86	Hydronalix	PO 706416	8	6
N683352C0346	12.RD		3,184	Composite Energy Technologies	Visa3749	3,18	4
SPE8EJ21D0020	12.RD		65,987	ADS, Inc.	PO 1133376	65,98	7
SPE8EJ21D0025	12.RD		6,095	Huntington Ingalls Industries	PO 00068024	6,09	5
SPM8EJ14D0004	12.RD		8,192	Huntington Ingalls Industries	PO 00066970	8,19	2
Defense POW/MIA Accounting Agency (DPAA)							
Past Conflict Accounting	12.740		2,678	University of California San Diego	704542	2,678	8
JS Army							
Basic, Applied, and Advanced Research in Science and Engineering	12.630	525,386				525,38	6
Basic, Applied, and Advanced Research in Science and Engineering	12.630		126,933	Mississippi State University	191000 361373 01	126,93	3
0C401550	12.RD		1	Applied Physical Sciences Corp	200019962		1
JS Army Corps of Engineers (USACE)							
V912HQ19C0040	12.RD	194,299				194,29	9 48,507
V912HQ20C0076	12.RD		54,696	University of St Andrews	Agreement 18390	54,69	6
Defense Advanced Research Projects Agency (DARPA)					-		
Research and Technology Development	12.910		11,784	Harvard University	133287 5115444	11,78	4
HR001119C0012	12.RD		47,352	Raytheon BBN Technologies Corporation	PO 4201924221	47,35	2
HR001120C0100	12.RD		6,963	Applied Physical Sciences Corporation	PO 210021746	6,96	3
HR001120C0100	12.RD		2,458	Applied Physical Sciences Corporation	PO 210021988	2,45	8
HR001120C0100	12.RD		1	Applied Physical Sciences Corporation	PO 200019965		1
HR001121C0064	12.RD		39,870	Makai Ocean Engineering	PO 211817	39,87	0
US Air Force							
FA807514D0014	12.RD		4,698	Alion Science and Technology Corportation	SUB1138244001	4,69	8
	12.110		-1,000	, co.c.ioo and roomiology corportation	0001100244001	4,03	•

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listing Number	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
FA807514D0021	12.RD		1	ProteQ	PO 20096	1	
FA807518D0002	12.RD		101,826	Alion Science and Technology Corportation	SUB1151615	101,826	
FA807518D0002	12.RD		31,958	Alion Science and Technology Corportation	PO PUR1165104	31,958	
FA807518D0002	12.RD		263,022	Alion Science and Technology Corportation	SUB1159006	263,022	
FA807518D0002	12.RD		491,777	Alion Science and Technology Corportation	SCF1159040	491,777	
FA875020C0535	12.RD		283,161	Systems and Technology Research	20200044	283,161	
			,	,		•	
Subtotal Department of Defense	•	55,508,123	5,282,624			60,790,747	1,635,618
Department of Interior							
Bureau of Ocean Energy Management							
Bureau of Ocean Energy Management (BOEM) Environmental Studies Program (ESP)	15.423	211,440				211,440	
Bureau of Ocean Energy Management (BOEM) Environmental Studies Program (ESP)	15.423		90,561	University of Alaska Fairbanks	UA 220029 P0 553784	90,561	
Bureau of Ocean Energy Management (BOEM) Environmental Studies Program (ESP)	15.423		18,044	University of Rhode Island	0008759 02112021	18,044	
Marine Minerals Activities Bureau of Reclamation	15.424		34,138	University of Washington	BPO58577 625395	34,138	
140R4018F0080	15.RD		8,250	American Southwest Ichthyological Researchers LLC	PO 20203121	8,250	
Bureau of Safety and Environmental Enforcement							
140M0118P0043	15.RD		10,648	Southern California Coastal Water Research Project	PO 17993	10,648	
National Park Service							
Natural Resource Stewardship US Geological Survey	15.944	12,423				12,423	
U S Geological Survey Research and Data Collection	15.808	1,896,998				1,896,998	
U S Geological Survey Research and Data Collection	15.808		40,167	University of Oxford	R44467	40,167	
140G0218D0006	15.RD	9,015				9,015	
140G0220D0001	15.RD	277,150				277,150	
VISA2937	15.RD	9,044				9,044	
Subtotal Department of Interior	•	2,416,070	201,808			2,617,878	-
National Aeronautics and Space Administration (NASA)							
Science	43.001	6,090,155				6,090,155	1,705,385
Science	43.001		98,973	New Mexico Institute of Mining and Technology	P0020052	98,973	
Science	43.001		116,337	University of Washington	UWSC10145	116,337	
Science	43.001		46,379	University of Colorado	1560578	46,379	
Science	43.001		26,931	Georgia Institute of Technology	AWD 103070 G1	26,931	
Science	43.001		23,819	University of Colorado	PO 1000731164	23,819	
Science	43.001		134,318	University of Maine	UMS1295	134,318	
Science	43.001		11,635	Jet Propulsion Laboratory	1670515	11,635	

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listing Number	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Science	43.001		530	Skidmore College	321751	530	
Science	43.001		2,692	Brown University	PUR 0092183	2,692	
Science	43.001		2,059	Oregon State University	NS278AA	2,059	
Science	43.001		51,882	University of Washington	57415	51,882	
Science	43.001		11,182	Massachusetts Institute of Technology	S5043 PO 453237	11.182	
Science	43.001		34,224	Atmospheric and Environmental Research Inc.	P2375 001	34,224	
Science	43.001		104,498	The Johns Hopkins University	155890	104,498	
Science	43.001		1,259	Southwest Research Institute	M99051CEP	1,259	
Science	43.001		30,540	Harvard University	133260 5096936	30.540	
Science	43.001		98,309	Bowdoin College	2017 003	98,309	
Science	43.001		148,438	Colorado State University	G0367101	148,438	
Science	43.001		46,799	Jet Propulsion Laboratory	1658837	46,799	
			,	•		,	
Science	43.001		46,003	Jet Propulsion Laboratory	1619027	46,003	
Science	43.001		(4,475)	Rensselaer Polytechnic Institute	PO 279708	(4,475)	
Science	43.001		6,987	Jet Propulsion Laboratory	PO 1668166	6,987	·
Subtotal National Aeronautics and Space Administrationm (NASA)		6,090,155	1,039,319			7,129,474	1,705,385
National Science Foundation							
Engineering Grants	47.041	216,052				216,052	
Engineering Grants	47.041		85,962	Armada Marine Robotics	101	85,962	
Engineering Grants	47.041		12,439	Northeastern University	0252778050	12,439	
Geosciences	47.050	112,721,538				112,721,538	28,537,865
Geosciences	47.050		10,120	University of Washington	BPO48082	10,120	
Geosciences	47.050		7,476	University of Nevada, Reno	MC8058	7,476	
Geosciences	47.050		4,785	University of Delaware	VISA6573	4,785	
Geosciences	47.050		10,916	Brown University	PUR 0086408	10,916	
Geosciences	47.050		36,763	Monterey Bay Aquarium Research Institute	2110497	36,763	
Geosciences	47.050		41,665	University of the Virgin Islands	20310804	41,665	
Geosciences	47.050		1,446,360	Monterey Bay Aquarium Research Institute	2010988	1,446,360	
Geosciences	47.050		74,618	University of California San Diego	704294	74,618	
Geosciences	47.050		27,554	University of Hawaii	MA1394	27,554	
Geosciences	47.050		118,965	University of Hawaii	MA1407	118,965	
Geosciences	47.050		7,494	University of California San Diego	128951830 PO S9002540	7,494	
Geosciences	47.050		68,276	University of North Carolina at Chapel Hill	PO Y22MTS0303	68,276	
Geosciences	47.050		4,486	San Jose State University Foundation	PO F020519	4,486	
Geosciences	47.050		32,443	Stony Brook University	72862 1128064 2	32,443	
Geosciences	47.050		14,836	University of Maryland	SA07523110 PO 85910	14,836	
Geosciences	47.050		2,444	University of Rhode Island	VISA3330	2,444	
Geosciences	47.050		30,904	University of Connecticut	323346	30,904	
Geosciences	47.050		3,342	University of Texas at Austin	PO 2022A03386	3,342	
Geosciences	47.050		91,895	Massachusetts Institute of Technology	5710003949	91,895	
Geosciences	47.050		11,727	University of California San Diego	KR 704776	11,727	
	47.050		6,493	University of Rhode Island	PO 0000175158	6.493	

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listing Number	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
							_
Geosciences	47.050		38,727	University of Washington	BPO55167V3 149460	38,727	•
Geosciences	47.050		134,174	Lamont Doherty Earth Observatory of Columbia University	2 GG015488	134,174	
Geosciences	47.050		173,660	Univerity of Southern California	87584150 PO 10565646	173,660	1
Geosciences	47.050		4,657	Bermuda Institute of Ocean Sciences	PO 57365	4,657	•
Geosciences	47.050		5,981	Southern Methodist University	PO SMETH 0000048092 0	5,981	
Geosciences	47.050		548	Bermuda Institute of Ocean Sciences	208162WHOI	548	
Geosciences	47.050		107,698	University of Rhode Island	0007337	107,698	
Geosciences	47.050		1,058,274	University of Washington	BPO58449 684301	1,058,274	
Geosciences	47.050		23,885	University of Rhode Island	PO 0000146806	23,885	
Geosciences	47.050		2,888	Lamont Doherty Earth Observatory of Columbia University	22B GG00939304	2,888	}
Geosciences	47.050		20,861	Lamont Doherty Earth Observatory of Columbia University	22 GG00939301	20,861	
Geosciences	47.050		246,589	University of California San Diego	99779473	246,589	1
Geosciences	47.050		33,588	University of California San Diego	131259736 PO S9002572	33,588	1
Geosciences	47.050		39,530	Bermuda Institute of Ocean Sciences	182285WHOI	39,530	1
Computer and Information Science And Engineering	47.070	404,106				404,106	;
Biological Sciences	47.074	650,518				650,518	13,477
Biological Sciences	47.074		19,200	Rutgers University	PO 1192623	19,200	1
Biological Sciences	47.074		102,866	University of North Carolina at Chapel Hill	PO Y21MTS0252	102,866	i
Biological Sciences	47.074		3,479	Marine Biological Laboratory	53522	3,479)
Social Behavioral and Economic Sciences	47.075	38,713				38,713	17,868
Education and Human Resources	47.076	6,814				6,814	
Polar Programs	47.078	1,792,685				1,792,685	;
Polar Programs	47.078		4,177	New Mexico Institute of Mining and Technology	P0021580	4,177	i
Polar Programs	47.078		59,540	Rutgers University	1389353	59,540)
Polar Programs	47.078		87,588	Rutgers University	1484644	87,588	;
Polar Programs	47.078		233,991	University of Alaska Fairbanks	UA 220021	233,991	
Polar Programs	47.078		5,012	New Mexico Institute of Mining and Technology	PO 020734	5,012	!
Office of International and Integrative Activities	47.079		177,120	University of South Alabama	A170170S003	177,120)
Office of International and Integrative Activities	47.079		8,007	Bigelow Laboratory for Ocean Sciences	BLOS 22002	8,007	•
Office of International and Integrative Activities	47.079		2,510	University of Texas at Austin	UTAUS SUB00000012	2,510)
Office of Integrative Activities	47.083	167,740				167,740)
Office of Integrative Activities	47.083	•	76,708	University of Cincinnati	013204002	76,708	\
Subtotal National Science Foundation	-	115,998,166	4,823,221	•		120,821,387	
Environmental Protection Agency	-					-	
Southeast New England Coastal Watershed Restoration Program	66.129		73,896	Restore Americas Estuaries	SNEPWG 1912 WHOI	73,896	1,584

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assitance Listin Number	g Direct	Pass-Thi	rough Pass-Through Entity	Pass-Through Enti Sponsor Number	ty Total Expenditures	Passed to Sub-Recipients
Southeast New England Coastal Watershed Restoration Program	66.129		16,652	Cape Cod Commission	SNEPWG18 9 CCC	16,652	
· · ·			.,				
Science To Achieve Results Star Research Program Subtotal Environmental Protection Agency	66.509	55,718 55,718	90,548		-	55,718 146,266	1,584
Department of Energy	-	33,710	90,340		-	140,200	1,304
	04.040	400.007				400.007	
Office of Science Financial Assistance Program Office of Science Financial Assistance Program	81.049 81.049	199,627	89,087	3newable, LLC.	AGREEMENT	199,627 89,087	
Renewable Energy Research And Development	81.087	79,416	09,007	Silewable, LLC.	AGREEMENT	79,416	
Renewable Energy Research And Development	81.087	73,410	19,930	Worcester Polytechnic Institute	10637GR	19,930	
Advanced Research Projects Agency Energy	81.135	1,314,318	10,000	Tronscolor - Sylvosimio module	10007 011	1,314,318	606,198
Advanced Research Projects Agency Energy	81.135	,- ,-	208,830	University of Alaska Fairbanks	UAF 190029	208,830	,
Advanced Research Projects Agency Energy	81.135		45,798	Fearless Fund	SUBAWARD	45,798	
DEEE0008930	81.RD		434,723	New York State Energy Research and Development	154677 PO 0000158737	434,723	85,000
DEAC0205CH11231	81.RD		23,768	University of Washington	BPO47547661981	23,768	
DEAR0000912	81.RD		209,288	Marine Biological Laboratory	53718	209,288	
Subtotal Department Of Energy	-	1,593,361	1,031,424		_	2,624,785	691,198
Department of Health And Human Services							
National Institutes Of Health							
Environmental Health	93.113	908,398				908,398	57,482
Environmental Health	93.113		80,436	European Molecular Biology Laboratory	WHOI 333801	80,436	
Environmental Health	93.113		39,203	University of Mississippi	1904038	39,203	
Environmental Health	93.113 93.143		158,230	Florida Gulf Coast University Boston University	17056 NIH WHOI01 4500002420	158,230 35,406	
NIEHS Superfund Hazardous Substances_Basic Research and Education			35,406	•			
NIEHS Superfund Hazardous Substances_Basic Research and Education	93.143		26,215	Boston University	4500003393	26,215	
NIEHS Superfund Hazardous Substances_Basic Research and Education	93.143		13,792	Boston University	4500003394	13,792	
Human Genome Research	93.172		29,186	European Molecular Biology	WHOI 312501	29,186	
Biomedical Research and Research Training	93.859	568,497	000.400		_	568,497	F7.400
Subtotal Department of Health and Human Services	-	1,476,895	382,468		_	1,859,363	57,482
Department of Homeland Security							
Centers for Homeland Security	97.061		1,207,329	University of Alaska Anchorage	PO P0485593	1,207,329	
Subtotal Department of Homeland Security	-	-	1,207,329		<u>-</u>	1,207,329	<u>-</u>
Total Research & Development Cluster	<u>-</u>	200,318,017	16,541,390		_	216,859,407	36,498,041
Economic Development Cluster							
Department of Commerce							
Economic Development Administration (EDA)							
Economic Adjustment Assistance	11.307	93,317			_	93,317	
Subtotal Department of Commerce	- -	93,317	-		<u>-</u>	93,317	
Total Economic Development Cluster	-	93,317	_		_	93,317	_
Total Federal Award Expenditures	<u> </u>	\$ 200,411,334	\$ 16,541,390		<u> </u>	\$ 216,952,724 \$	36,498,041

1. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") has been prepared using the accrual basis of accounting and in accordance with Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). The purpose of the Schedule is to present a summary of those activities of the Woods Hole Oceanographic Institution (the "Institution") for the year ended December 31, 2021 which have been financed by the U.S. Government (federal awards). For purposes of the Schedule, federal awards include all federal assistance entered into directly between the federal government and the Institution and federal funds awarded to the Institution by a prime recipient. Because the Schedule presents only a selected portion of the activities of the Institution, it is not intended to and does not present the financial position, changes in net assets, or cash flows of the Institution. Negative amounts represent adjustments to amounts reported in prior years in the normal course of business. Full Assistance Listing Numbers and pass-through entity identification numbers are presented when available.

2. Fringe Benefits and Indirect Costs

The Institution recovers fringe benefits and indirect costs associated with federal award programs pursuant to fixed rates with carryforward provisions negotiated annually with the Office of Naval Research (ONR). The Defense Contract Audit Agency (DCAA) has completed an audit of the rates used by the Institution through the fiscal year ended December 31, 2020. The 2021 Indirect Cost recovery rates, which are fixed with carryforward provisions, include the impact of prior year settlements. The Institution applies its predetermined approved facilities and administrative rate when charging indirect costs to federal awards rather than the 10% de minimis cost rate as described in Section 200.414 of the Uniform Guidance.

Part II – Reports on Internal Control and Compliance and Other Matters



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 Trustees of Woods Hole Oceanographic Institution

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 Woods Hole Oceanographic Institution (the "Institution"), 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 July 19, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Institution'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 Institution's internal control. Accordingly, we do not express an opinion on the effectiveness of the Institution'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 Institution'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 Institution'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 Intuition's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Krieewaterhouse Coopus LLP

Boston, Massachusetts July 19, 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 Trustees of Woods Hole Oceanographic Institution

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Woods Hole Oceanographic Institution's (the "Institution") 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 Institution's major federal programs for the year ended December 31, 2021. The Institution'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 Institution 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 Institution 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 Institution'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 Institution'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 Institution'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 Institution'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 Institution'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 Institution'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 Institution'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.

Boston, Massachusetts

Pricemeterbourge Cooper LLP

July 29, 2022



Woods Hole Oceanographic Institution Schedule of Findings and Questioned Costs Year Ended December 31, 2021

Section I - Summary of Auditor's Results

Financial Statements

Type of auditor's report issued: Unmodified

Internal control over financial reporting:

Material weakness(es) identified?

 Significant deficiency(ies) identified that are not considered to be material weaknesses?

Noncompliance material to financial statements noted?

Federal Awards

Internal control over major programs:

Material weakness(es) identified?

 Significant deficiency(ies) identified that are not considered to be material weaknesses?

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

Identification of major programs: Assistance Listing Number(s)

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Name of Federal Program or Cluster

Various Research and Development Cluster

Dollar threshold used to distinguish between Type A and Type B

programs:

\$ 3,000,000

Auditee qualified as a low-risk auditee? Yes

Section II - Financial Statement Findings

None noted.

Section III - Federal Financial Assistance Findings and Questioned Costs

There are no federal financial assistance findings or questioned costs to report on.

Woods Hole Oceanographic Institution Summary Schedule of Prior Year Findings and Status Year Ended December 31, 2021

Finding 2020-001: Expense cut-off related to the financial statements of the Institution- Significant Deficiency

Criteria

As part of the audit, PwC is required to obtain an understanding of internal controls relevant to the audit, which includes the end to end process around key financial reporting cycles and evidence the implementation of relevant controls and the related IT dependencies. (AU-C section 315).

Condition

In conducting expense testing of the Institution, several transactions were included in the inappropriate period based on the applicable service period, or delivery of goods to the Institution. Based upon the volume of transactions affected as well as the dollar value of items included in improper periods, this was determined to be a significant deficiency.

Cause

Due to a short close process at the Institution, there is not a sufficient period to capture all expenses in the appropriate period at year-end. This is exacerbated by a limitation in the accounting system which prevents the use of sufficient accounting periods to appropriately capture invoice cut-off.

Effect

Invoices received after the current close period may not be captured in the results of the Institution for the vear.

Recommendation

PwC recommended that management implement a process to ensure that expenses are captured in the appropriate period based upon the service period or receipt of goods.

Status

We implemented a new control as of December 31, 2021 to address the finding noted above. The new control includes keeping the accounts payable process open for a longer period of time after year-end and includes a manual cutoff review of certain invoices based on certain risk-based criteria. The measure we introduced was successful in remediating the prior year deficiency, as no significant issues in this area arose during the 2021 Financial Statement audit.