ANNUAL REPORT OF HATCHERY ACTIVITIES

MAKAH NATIONAL FISH HATCHERY

QUILCENE NATIONAL FISH HATCHERY

FISCAL YEAR 1987

FISH PLANTING SUMMARIES

EGG TRANSFER SUMMARIES

FISH TRANSFER SUMMARIES

BIODATA SUMMARIES

RACK RETURN SUMMARIES

HATCHERY PRODUCTION SUMMARIES

FISH PLANTING SUMMARY 03/31/88

Hatchery	Species	Stock	Brood Year	Release Site	First Release Date	Last Release Date	Number	Weight	CWT Code	DEV Stage	Release Group
MAKAH NFH	CHUM	MAKA	86	MAKAH NFH	04/20/87	04/20/87	57464	137	unmarked	FRY	MAKA000026
MAKAH NFH	CHUM	WLCT	86	MAKAH NFH	04/20/87	05/04/87	2840463	5200	unmarked	FRY	MAKA000027
MAKAH NFH	COHO	MAKA	85	WAATCH RIVER	04/15/87	04/15/87	36466	2308	unmarked	YEARLING	MAKA00014A
MAKAH NFH	COHO	MAKA	85	MAKAH NFH	04/15/87	04/15/87	250000	15823	unmarked	YEARLING	MAKA000014
MAKAH NFH	COHO	QUIN AND MAKA	86	MAKAH NFH	07/28/87	07/28/87	99619	1688	unmarked	SUBYEARLIN	MAKA000023
MAKAH NFH	FALL CHINOOK	MAKA	86	SOOES RIVER	04/18/87	04/18/87	29923	108	850513	SUBYEARLIN	MAKA000021
MAKAH NFH	FALL CHINOOK	MAKA	86	SOOES RIVER	04/18/87	04/18/87	6303	23	adclip	SUBYEARLIN	MAKA000021
MAKAH NFH	FALL CHINOOK	MAKA	86	SOOES RIVER	04/18/87	04/18/87	30327	109	850512	SUBYEARLIN	MAKA000021
MAKAH NFH	FALL CHINOOK	MAKA	86	SOOES RIVER	04/18/87	04/18/87	5478	20	adclip	SUBYEARLIN	MAKA000021
MAKAH NFH	FALL CHINOOK	MAKA	86	SOOES RIVER	04/18/87	04/18/87	31866	115	850514	SUBYEARLIN	MAKA000021
MAKAH NFH	FALL CHINOOK	MAKA	86	SOOES RIVER	04/18/87	04/18/87	1293	5	adclip	SUBYEARLIN	MAKA000021
MAKAH NFH	FALL CHINOOK	MAKA	86	MAKAH NFH	04/28/87	05/11/87	562947	6830	unmarked	SUBYEARLIN	MAKA000020
MAKAH NFH	FALL CHINOOK	MAKA	86	MAKAH NFH	04/28/87	05/11/87	127387	1545	519784	SUBYEARLIN	MAKA000020
MAKAH NFH	FALL CHINOOK	MAKA	86	MAKAH NFH	04/28/87	05/11/87	10180	123	adclip	SUBYEARLIN	MAKA000020
MAKAH NFH	WINTER STEELHEAD	MAKA	87	SAIL RIVER	06/04/87	06/04/87	74000	587	unmarked	SUBYEARLIN	MAKA000029
MAKAH NFH	WINTER STEELHEAD	MAKA	86	WAATCH RIVER	04/13/87	04/13/87	14866	2859	adclip	YEARLING	MAKA000012
MAKAH NFH	WINTER STEELHEAD	MAKA	86	MAKAH NFH	04/14/87	04/14/87	61051	12210	adclip	YEARLING	MAKA000015
MAKAH NFH	WINTER STEELHEAD	MAKA	87	MAKAH NFH	07/29/87	07/29/87	16222	659	unmarked	SUBYEARLIN	MAKA000029
QUILCENE NFH	CHUM	QUIL AND WLCT	86	QUILCENE NFH	04/27/87	05/04/87	2503091	3829	unmarked	FRY	QUIL000025
QUILCENE NFH	COHO	QUIL	86	53170076	03/31/87	03/31/87	98700	155	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	86	53170077	03/31/87	03/31/87	57300	90	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	86	53170129	03/30/87	03/30/87	123900	238	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	86	53170170	03/30/87	03/30/87	13700	28	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	86	53170203	03/30/87	03/30/87	86400	176	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	86	53170205	03/30/87	03/30/87	42200	86	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	86	53170208	03/30/87	03/30/87	6400	13	unmarked	SUBYEARLIN	QUIL000023
QUILCENE NFH	COHO	QUIL	85	QUILCENE NFH	05/07/87	05/08/87	617231	26836	unmarked	YEARLING	QUIL000009
QUILCENE NFH	FALL CHINOOK	NOOF	86	DOSEWALLIPS RIVER	03/20/87	03/20/87	54629	150	unmarked	SUBYEARLIN	QUIL000021

FISH PLANTING SUMMARY 03/31/88

Hatchery	Species	Stock	Brood Year	Release Site	First Release Date	Last Release Date	Number	Weight	CWT Code	DEV Stage	Release Group
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	5879	256	unmarked	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	25442	1106	050832	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	2640	115	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	27606	1200	051462	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	2014	88	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	22951	998	051831	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	2924	127	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	22388	973	051832	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	3736	162	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	22862	994	051833	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	3236	141	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	21811	948	051748	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	3580	156	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	20694	900	051749	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	3680	160	adclip	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	18637	810	051750	YEARLING	QUIL000014
QUILCENE NFH	SPRING CHINOOK	QUIL	85	QUILCENE NFH	05/08/87	05/08/87	5504	239	adclip	YEARLING	QUIL000014

FISH TRANSFER SUMMARY 03/30/88

Origin Loc/Agency	Species	Stock	Brood Year	Receiving Loc/Agency	Initial Transfer Date	Final Transfer Date	Number	Pounds	Release Group ID
MAKAH NFH	FALL CHINOOK	HOKO	86	HOKO REARING POND,MAKAH	04/29/87	04/29/87	162740	1466	MAKA000022

EGG TRANSFER SUMMARY 04/04/88

Origin Loc/Agency	Species	Stock	Brood Year	Receiving Loc/Agency	Transfer Date	Number	DEV Stage
HOKO REARING POND,MAKAH	FALL CHINOOK	HOKO	86	MAKAH NFH	10/17/86	116303	GREEN
HOKO REARING POND,MAKAH	FALL CHINOOK	HOKO	86	MAKAH NFH	10/22/86	36375	GREEN
HOKO REARING POND,MAKAH	FALL CHINOOK	HOKO	86	MAKAH NFH	10/24/86	6970	GREEN
HOKO REARING POND,MAKAH	FALL CHINOOK	HOKO	86	MAKAH NFH	10/27/86	28790	GREEN
HOKO REARING POND,MAKAH	FALL CHINOOK	HOKO	86	MAKAH NFH	11/03/86	4562	GREEN
HOKO REARING POND,MAKAH	WINTER STEELHEAD TRO	HOKO	87	MAKAH NFH	01/01/87	28412	GREEN
MAKAH NFH	WINTER STEELHEAD TRO	HOKO	87	HOKO REARING POND,MAKAH	02/18/87	26240	EYED
NOOKSACK SFH, WDF	FALL CHINOOK	NOOF	86	QUILCENE NFH	11/05/86	76000	EYED
QUILCENE NFH	CHUM	WLCT	86	MAKAH NFH	01/21/87	960500	EYED
QUILCENE NFH	CHUM	WLCT	86	MAKAH NFH	02/04/87	1539250	EYED
QUILCENE NFH	CHUM	WLCT	86	MAKAH NFH	02/11/87	138750	EYED
QUILCENE NFH	CHUM	WLCT	86	QUILCENE NFH	02/11/87	306750	EYED
QUILCENE NFH	CHUM	WLCT	86	WAATCH CREEK,MAKAH	02/11/87	342250	EYED
QUILCENE NFH	COHO	QUIL	86	CHIMACUM SCHOOL	12/17/86	102000	EYED
QUINAULT NFH	COHO	QUIN	86	MAKAH NFH	01/05/87	200000	EYED

BIODATA SUMMARY 04/05/88

LOCATION	RETURN YEAR	SPECIES	% SAMPLED
MAKAH NFH	86	CHUM	80.8

	MALE			FEMALE			
AGE	Expanded Number	Percent Sampled	Mean Fork Length	Expanded Number	Percent Sampled	Mean Fork Length	Total Number in Age Class
3	1	100.0	650	4	100.0	625	5
4	22	63.6	752	20	95.0	690	42
TOTALS	23			24			47

THESE FISH WERE AGED BY Scale Analysis
BIODATA SUMMARY MAY NOT ACCURATELY DEPICT RUN SIZE (USE RACK RETURN SUMMARY)

BIODATA SUMMARY 04/05/88

LOCATION	RETURN YEAR	SPECIES	% SAMPLED
MAKAH NFH	86	COHO	0.0

	MALE			FEMALE			
AGE	Expanded Number	Percent Sampled	Mean Fork Length	Expanded Number	Percent Sampled	Mean Fork Length	Total Number in Age Class
UNK	3,270	0.0	-	3,628	0.0	-	6,898
TOTALS	3,270			3,628			6,898

THESE FISH WERE AGED BY Scale Analysis
BIODATA SUMMARY MAY NOT ACCURATELY DEPICT RUN SIZE (USE RACK RETURN SUMMARY)

BIODATA SUMMARY 04/05/88

LOCATION	RETURN YEAR	SPECIES	% SAMPLED
MAKAH NFH	86	FALL CHINOOK	68.6

	MALE			FEMALE			
AGE	Expanded Number	Percent Sampled	Mean Fork Length	Expanded Number	Percent Sampled	Mean Fork Length	Total Number in Age Class
2	163	74.2	434	0	-	-	163
3	75	52.0	676	5	100.0	765	80
4	195	49.2	905	141	96.4	894	336
5	10	30.0	988	20	90.0	954	30
TOTALS	443			166			609

THESE FISH WERE AGED BY Scale Analysis
BIODATA SUMMARY MAY NOT ACCURATELY DEPICT RUN SIZE (USE RACK RETURN SUMMARY)

BIODATA SUMMARY 04/05/88

LOCATION	RETURN YEAR	SPECIES	% SAMPLED
MAKAH NFH	86	WINTER STEELHEAD TRO	78.0

	MALE			FEMALE			
AGE	Expanded Number	Percent Sampled	Mean Fork Length	Expanded Number	Percent Sampled	Mean Fork Length	Total Number in Age Class
2	12	100.0	456	0	-	-	12
3	379	75.2	647	250	80.4	629	629
4	112	77.6	782	160	80.0	760	272
5	2	50.0	747	2	100.0	726	4
TOTALS	505			412			917

THESE FISH WERE AGED BY Scale Analysis
BIODATA SUMMARY MAY NOT ACCURATELY DEPICT RUN SIZE (USE RACK RETURN SUMMARY)

BIODATA SUMMARY 04/05/88

LOCATION	RETURN YEAR	SPECIES	% SAMPLED
QUILCENE NFH	86	CHUM	28.6

	MALE			FEMALE			
AGE	Expanded Number	Percent Sampled	Mean Fork Length	Expanded Number	Percent Sampled	Mean Fork Length	Total Number in Age Class
3	344	24.1	647	289	26.6	607	633
4	618	33.9	735	648	26.2	686	1,266
5	50	38.0	759	14	21.4	654	64
TOTALS	1,012			951			1,963

THESE FISH WERE AGED BY Scale Analysis
BIODATA SUMMARY MAY NOT ACCURATELY DEPICT RUN SIZE (USE RACK RETURN SUMMARY)

BIODATA SUMMARY 04/05/88

LOCATION	RETURN YEAR	SPECIES	% SAMPLED
QUILCENE NFH	86	COHO	11.5

	MALE			FEMALE			
AGE	Expanded Number	Percent Sampled	Mean Fork Length	Expanded Number	Percent Sampled	Mean Fork Length	Total Number in Age Class
2	627	25.6	317	0	-	-	627
3	395	16.7	426	0	-	-	395
UNK	0	-	-	950	0.0	-	950
TOTALS	1,022			950			1,972

THESE FISH WERE AGED BY Scale Analysis
BIODATA SUMMARY MAY NOT ACCURATELY DEPICT RUN SIZE (USE RACK RETURN SUMMARY)

RACK RETURN SUMMARY REPORT DATE) 04/07/88

LOCATION) MAKAH NFH RETURN YEAR) 86

Species	Stock	Usage	Unknown or Mixed Sexes No.	Unknown or Mixed Sexes Lb.	Males No.	Males Lb.	Females No.	Females Lb.	Jacks No.	Jacks Lb.	Unseparated Jacks and Males No.	Unseparated Jacks and Males Lb.	Total
CHUM		SPAWNED			14	0	23	0					37
CHUM		SURPLUS			1	0							1
CHUM		PASSED OV					1	0					1
CHUM		DEAD IN P			8	0							8
Total Return of Species for Year													47
COHO		SPAWNED			99	0	102	0					201
COHO		SURPLUS			2,050	0	2,630	0	209	0			4,889
COHO		PASSED OV			644	0	755	0	53	0			1,452
COHO		DEAD IN P			215	0	141	0					356
Total Return of Species for Year													6,898
FALL CHINOOK		SPAWNED			140	0	156	0	17	0			313
FALL CHINOOK		SURPLUS			1	0			198	0			199
FALL CHINOOK		PASSED OV			27	0	4	0	15	0			46
FALL CHINOOK		DEAD IN P			40	0	2	0	6	0			48
FALL CHINOOK		BAD FEMAL					4	0					4
FALL CHINOOK		GREEN FEM					1	0					1
Total Return of Species for Year													611
WINTER STEELHEAD TRO		SPAWNED			50	0	50	0					100
WINTER STEELHEAD TRO		SURPLUS			441	0	363	0	13	0			817
WINTER STEELHEAD TRO		DEAD IN P			2	0							2
Total Return of Species for Year													919

RACK RETURN SUMMARY REPORT DATE) 04/07/88

LOCATION) QUILCENE NFH RETURN YEAR) 86

Species	Stock	Usage	Unknown or Mixed Sexes No.	Unknown or Mixed Sexes Lb.	Males No.	Males Lb.	Females No.	Females Lb.	Jacks No.	Jacks Lb.	Unseparated Jacks and Males No.	Unseparated Jacks and Males Lb.	Total
CHUM		SPAWNED			1,011	0	873	0					1,884
CHUM		SURPLUS			1	0	71	0					72
CHUM		DEAD IN P			1	0							1
CHUM		BAD FEMAL					3	0					3
CHUM		GREEN FEM					5	0					5
Total Return of Species for Year													1,965
COHO		SPAWNED			289	0	709	0					998
COHO		SURPLUS			373	0	136	0	370	0			879
COHO		PASSED OV	466	0					33	0			499
COHO		DEAD IN P			25	0	84	0					109
COHO		BAD FEMAL					1	0					1
COHO		GREEN FEM					20	0					20
Total Return of Species for Year													2,506
SPRING CHINOOK		SPAWNED			18	0	45	0	5	0			68
SPRING CHINOOK		SURPLUS							47	0	90	0	137
SPRING CHINOOK		DEAD IN P			15	0	7	0	2	0	15	0	39
SPRING CHINOOK		BAD FEMAL					1	0					1
Total Return of Species for Year													245

RACK RETURN SUMMARY REPORT DATE) 03/18/88

LOCATION) WALCOTT SLOUGH RETURN YEAR) 86

Species	Stock	Usage	Unknown or Mixed Sexes No.	Unknown or Mixed Sexes Lb.	Males No.	Males Lb.	Females No.	Females Lb.	Jacks No.	Jacks Lb.	Unseparated Jacks and Males No.	Unseparated Jacks and Males Lb.	Total
CHUM		SPAWNED			2,154	0	1,686	0					3,840
CHUM		BAD FEMAL					114	0					114
CHUM		GREEN FEM					82	0					82
Total Return of Species for Year													4,036

HATCHERY) 5399MAKA FY) 87

SPECIES	STOCK	TOTAL RETURN MALES	TOTAL RETURN FEMALES	TOTAL RETURN UNSEXED	TOTAL RETURN TOTAL ADULTS	FEMALES SPAWNED	MALES SPAWNED	EGGS TAKEN	EGGS TRANS	FRY TRANSFERRED NUMBER	FRY TRANSFERRED LBS	FRY PLANTED NUMBER	FRY PLANTED LBS	SUBYEARLING TRANSFERRED NUMBER	SUBYEARLING TRANSFERRED LBS	SUBYEARLING PLANTED NUMBER	SUBYEARLING PLANTED LBS	FALL RELEASE PLANTED NUMBER	FALL RELEASE PLANTED LBS	YEARLING TRANSFERRED NUMBER	YEARLING TRANSFERRED LBS	YEARLING PLANTED NUMBER	YEARLING PLANTED LBS
CHS	MAKA	23	24	0	47	23	14	57500	0	0	0	57464	137	0	0	0	0	0	0	0	0	0	0
CHS	WLCT	0	0	0	0	0	0	0	0	0	0	2840463	5200	0	0	0	0	0	0	0	0	0	0
COS	MAKA	3270	3628	0	6898	102	99	255000	0	0	0	0	0	0	0	0	0	0	0	0	0	286466	18131
COS	QUIN AND MAKA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99619	1688	0	0	0	0	0	0
FCS	HOKO	0	0	0	0	0	0	0	0	0	0	0	0	162740	1466	0	0	0	0	0	0	0	0
FCS	MAKA	444	167	0	611	156	157	624000	0	0	0	0	0	0	0	805704	8878	0	0	0	0	0	0
WST	HOKO	0	0	0	0	0	0	0	26240	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WST	MAKA	506	413	0	919	50	50	150000	0	0	0	0	0	0	0	90222	1246	0	0	0	0	75917	15069

The number of eggs transferred may exceed the number of eggs taken since eggs may have been received and combined with other stocks.

14

HATCHERY PRODUCTION SUMMARY

HATCHERY) 5399QUIL FY) 87

SPECIES	STOCK	TOTAL RETURN MALES	TOTAL RETURN FEMALES	TOTAL RETURN UNSEXED	TOTAL RETURN TOTAL ADULTS	FEMALES SPAWNED	MALES SPAWNED	EGGS TAKEN	EGGS TRANS	FRY TRANSFERRED NUMBER	FRY TRANSFERRED LBS	FRY PLANTED NUMBER	FRY PLANTED LBS	SUBYEARLING TRANSFERRED NUMBER	SUBYEARLING TRANSFERRED LBS	SUBYEARLING PLANTED NUMBER	SUBYEARLING PLANTED LBS	FALL RELEASE PLANTED NUMBER	FALL RELEASE PLANTED LBS	YEARLING TRANSFERRED NUMBER	YEARLING TRANSFERRED LBS	YEARLING PLANTED NUMBER	YEARLING PLANTED LBS
CHS	QUIL	1013	952	0	1965	873	1011	2182500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHS	QUIL AND WLCT	0	0	0	0	0	0	0	0	0	0	2503091	3829	0	0	0	0	0	0	0	0	0	0
CHS	WLCT	0	0	0	0	0	0	0	3287500	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COS	QUIL	1090	950	466	2506	709	289	1772500	102000	0	0	0	0	0	0	428600	786	0	0	0	0	617231	26836
FCS	NOOF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54629	150	0	0	0	0	0	0
SCS	QUIL	87	53	105	245	45	23	180000	0	0	0	0	0	0	0	0	0	0	0	0	0	215584	9373

The number of eggs transferred may exceed the number of eggs taken since eggs may have been received and combined with other stocks.

HATCHERY PRODUCTION SUMMARY

HATCHERY) 5393WLCT FY) 87

SPECIES	STOCK	TOTAL RETURN MALES	TOTAL RETURN FEMALES	TOTAL RETURN UNSEXED	TOTAL ADULTS	FEMALES SPAWNED	MALES SPAWNED	EGGS TAKEN	EGGS TRANS	FRY TRANSFERRED NUMBER	FRY TRANSFERRED LBS	FRY PLANTED NUMBER	FRY PLANTED LBS	SUBYEARLING TRANSFERRED NUMBER	SUBYEARLING TRANSFERRED LBS	SUBYEARLING PLANTED NUMBER	SUBYEARLING PLANTED LBS	FALL RELEASE PLANTED NUMBER	FALL RELEASE PLANTED LBS	YEARLING TRANSFERRED NUMBER	YEARLING TRANSFERRED LBS	YEARLING PLANTED NUMBER	YEARLING PLANTED LBS
CHS	WLCT	2154	1882	0	4036	1686	2154	4215000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

The number of eggs transferred may exceed the number of eggs taken since eggs may have been received and combined with other stocks.