
CHAPTER 11: BLACK BEAR MANAGEMENT REPORT

From: 1 July 2010

To: 30 June 2013¹

LOCATION

GAME MANAGEMENT UNIT: 12 (10,107 mi²)

GEOGRAPHIC DESCRIPTION: Upper Tanana and White River drainages, including the northern Alaska Range east of the Robertson River, and the Mentasta, Nutzotin, and northern Wrangell Mountains

BACKGROUND

Historically, human use of black bears in Unit 12 was relatively low, despite liberal hunting regulations and moderate bear population levels. Most black bear hunting occurred along the highway system and the Tanana River.

In 1992 interest in black bear hunting increased, particularly at bait stations, and has remained high relative to previous levels. Most bears are taken by local residents in the spring and are an important meat source. Even before regulations were implemented requiring salvage of black bear meat from 1 January to 31 May, meat was salvaged from over 90% of all black bears harvested by local residents. In the fall most black bears were harvested incidentally during hunts for other species.

MANAGEMENT DIRECTION

MANAGEMENT GOALS

- Protect, maintain, and enhance the black bear population and its habitat in concert with other components of the ecosystem.
- Provide the greatest sustained opportunity to participate in hunting black bears.

MANAGEMENT OBJECTIVE

- Manage for a harvest of black bears that maintains 55% or more males in the combined harvests during the most recent 3 years.

¹ At the discretion of the reporting biologist, this unit report may contain data collected outside the report period.

METHODS

Harvest was estimated using mandatory harvest reports. To increase the reporting rate, reminder letters were sent to hunters who did not initially report. Data obtained from the reports was used to determine total harvest, hunter residency, success rates, harvest chronology, and transportation used. Additional harvest data, including skull size, salvage of meat, and bait use, was collected during the optional process of sealing harvested bears. Harvest data were summarized by regulatory year (RY), which begins 1 July and ends 30 June (e.g., RY12 = 1 July 2012–30 June 2013). Hunters were required to register all black bear bait stations and the distribution of bait stations and harvest were monitored.

Blueberry abundance has been monitored at 5 permanent blueberry sample areas in Unit 12 and 3 sample areas in adjacent Unit 20E since 2000. Sample sites were selected for the presence of blueberry plants in a variety of habitat types, aspects, elevations, and slopes. Annual rainfall and temperature was monitored at each site to determine their effects on blossom and berry production. Berry production is estimated by counts of berries within 5 1-m² plots in each area in late July and early August of each year. Through continued monitoring it may be possible to compare berry production between years and sites, and to evaluate effects of berry abundance on bear harvest and problem bear incidents.

RESULTS AND DISCUSSION

POPULATION STATUS AND TREND

Population Size

During RY10–RY12 no population surveys were conducted in Unit 12 to determine the black bear population size and trend. However, I estimated the RY10–RY12 Unit 12 black bear population at 700–1,000 bears based on limited radiotelemetry data collected in Unit 12 (Kelleyhouse 1990), and on density estimates in Unit 20A of 12–18 black bears/100 mi² (46–67/1,000 km²; Hechtel 1991) and 12–19 black bears/100 mi² (46–75/1,000 km²; C. Gardner, ADF&G unpublished data, Fairbanks). Both density estimates in Unit 20A excluded cubs of the year.

No major climatic anomalies or habitat alterations occurred in Unit 12 during RY10–RY12. Wildfires occurred on 28 mi² and 112 mi² in Unit 12 during 2010 and 2013 respectively. Some bears may have been displaced from the burned areas but due to the small size of the fires, the overall population trend was likely stable.

Population Composition

Few data were available on population composition in Unit 12. Sex ratios in the harvest were not representative of the population because females with cubs were protected by regulation.

During RY10–RY12, productivity of the black bear population in Unit 12 appeared adequate based on the animals harvested and on numerous sightings of sows with cubs. The reproductive interval (length of time between parturition and weaning), determined by observations of radiocollared bears, was 2–3 years (Kelleyhouse 1990), similar to other black bear populations in Interior Alaska (Miller 1987).

Distribution and Movements

Black bears are distributed throughout the forested areas that include 4,396 mi² (11,386 km²) of Unit 12 based on LANDFIRE™ (2009; <http://www.landfire.gov/>) vegetation classifications using the 2001 Landsat™ imagery (ADF&G, unpublished data, Fairbanks). In fall and spring, bears move into the shrub zones to feed on berries and succulent vegetation. In 1990 a forest fire burned approximately 156 mi² of black bear habitat in the Tok River valley. Observations by members of the public as well as information gathered incidental to other fieldwork suggested black bear use of the area was subsequently reduced. By 1994 bears began using the edges of the burn for feeding. Beginning in 1997, incidental sightings indicated black bears were utilizing most areas of the burn. In 2004, 2010, and 2013, wildfires burned 434 mi², 28 mi², and 112 mi² of black bear habitat in Unit 12. These fires initially reduced habitat availability, but likely will result in long-term positive effects on black bear habitat.

Kelleyhouse (1990) investigated black bear movements in a portion of Unit 12. He reported home ranges of 16 mi² for an adult female, 3 mi² for a subadult male, and 63 mi² for an adult male.

MORTALITY

Harvest

Season and Bag Limit. There was no closed season for black bears in Unit 12, and the bag limit was 3 bears. Harvest of cubs (in first year of life) or females accompanied by cubs was prohibited.

Alaska Board of Game Actions and Emergency Orders. Starting in RY09 the Board of Game (board) required hunters to possess harvest tickets for black bears in all units where black bear sealing was required, including Unit 12. Beginning in RY10, the board classified black bears as furbearers as well as big game. Although the board did not open black bear trapping seasons, this furbearer classification and other regulatory changes allowed hunters to legally sell black bear hides and parts, except gall bladders. The board subsequently amended these regulations so that sale of black bear meat remained illegal in RY10. The sealing requirement in Unit 12 was eliminated in RY10, except for bears removed from Alaska or sold, and salvage requirements for black bears harvested during 1 June–31 December were changed to allow hunters to salvage either the hide or meat with no requirement to salvage the skull. Also beginning in RY10, sealed black bear hides and skulls taken under a hunting license were allowed to be sold. The board also increased the maximum number of bait stations allowed to be registered by guides from 2 to 10 beginning in spring 2011. In March 2012 the board approved same-day-airborne take of black bears at bait stations in Unit 12, provided the black bear is at the bait station and that the hunter is at least 300 feet from the airplane.

No emergency orders were issued during RY10–RY12.

Harvest by Hunters. During RY10–RY12, 98–139 hunters (\bar{x} = 118) reported taking 36–43 black bears (\bar{x} = 40) annually in Unit 12 (Table 1). Estimated harvest rate was 4–6% of the adult population, but without detailed population estimates the precise harvest rate is unknown. Annual average black bear harvest has increased from 25.1 bears during RY80–RY91 to 36.1 bears during RY92–RY03 and 42 bears during RY04–RY12. Males composed 62–86% of the

harvest (\bar{x} = 74%) during RY10–RY12 (Table 1), meeting the harvest objective of >55% males for all 3 years.

During RY10–RY12, 57% of harvested bears were sealed, and the average skull size of sealed males was 16.9 inches (n = 47), slightly higher than the RY07–RY09 average of 16.6 inches. Increased harvest since RY92 has not affected male skull size. Average skull size of male black bears harvested in Unit 12 has remained consistent since RY80. During RY92–RY97 average skull size was 16.4 inches (σ = 0.326), compared to 16.4 inches (σ = 0.437) during RY80–RY91.

About 80% of black bear harvest in Unit 12 occurred along the road system within the Tok and Tanana River valleys. Few hunters accessed remote portions of Unit 12 to hunt black bears.

Beginning in RY10, information on black bear harvest over bait is only available from the optional process of sealing harvested bears. During RY10–RY12, 63% of spring-harvested sealed bears were taken over bait. This compares to an average of 72% and 75% spring-harvest over bait during RY07–RY09 and RY04–RY06 respectively. The use of bait stations by successful hunters increased substantially in RY01. During RY89 and RY91, 45% of the spring harvest was taken over bait (5–8 bears).

Circumstantial evidence indicates that berry abundance may affect bear harvest. During years of poor berry production, bears may travel more in search of berries and/or may be more attracted to hunter-killed moose or caribou or other human foods (Gardner 2002). These behaviors increase the vulnerability of bears to hunters. Low blueberry abundance in fall 2006 and 2012 (Table 2) coincided with high fall harvest of black bears. However black bear harvest in Unit 12 was again high in 2008 when blueberries were relatively abundant. In 2010 when blueberries were again abundant, 1 black bear was killed in defense of life or property and numerous black bear incidents were reported in communities and campsites along the road system in Units 12 and 20E.

Hunter Residency and Success. The overall success rate of 33% during RY10–RY12 was higher than the 28% reported in RY09, the first year harvest tickets were issued for black bears in Unit 12 (Table 3). Success rates among Alaska residents (33%) and nonresidents (39%) were similar. Alaska residents harvested 86–90% (\bar{x} = 88%) of the black bears taken in Unit 12, and during RY10–RY11 76% of Alaska resident hunters who had their bear(s) sealed reported salvaging at least some meat (there is incomplete data on meat salvage for RY12). Unit 12 residents took an average of 42% of the harvest, which is similar to the previous 5-year average of 42%. During RY10–RY12, nonresidents took an average of 4.7 black bears per year. With the exception of RY05 and RY08, nonresident harvest has been stable since RY95 and has averaged 5.2 black bears per year. Guided nonresidents harvested 71% of the bears killed by nonresidents during RY10–RY12.

During RY10–RY12, successful hunters spent an average of 4.8 days afield annually hunting black bears compared to 2.8 days during RY07–RY09 and 4.7 days during RY04–RY06. During RY90–RY94 the average number of days afield was 8.7 days. The differences among the periods probably reflect improved success at bait stations and an increase in the number of hunters satisfied with harvesting only 1 bear. During RY10–RY12 an average of 8.4% of hunters took >1 bear compared to 15.5% during RY95–RY00, and 28.0% during RY90–RY94.

Harvest Chronology. During RY10–RY12 the average percent of the harvest taken during the spring was 75%, greater than the averages of 66% in RY07–RY09 and 70% in RY04–RY06 (Table 4). In RY12 only 7% of the black bear harvest occurred during May due to prolonged winter conditions with deep snow persisting through the month.

Transport Methods. During RY10–RY12, 4-wheelers (27%) and highway vehicles (35%) continued to be the most common modes of transportation used by successful black bear hunters (Table 5). The use of boats (11%) and off-road vehicles (5%) increased compared to previous reporting periods.

Other Mortality

There are no data on the mortality rate of cubs in this area; however, Miller (1987) found that cubs of the year in the Susitna Basin had a natural mortality rate of 35%. Additional natural mortality also occurred among radiocollared adult black bears. Other than hunting, human influence on bear survival in Unit 12 appears to be minimal.

HABITAT

Assessment

Approximately one-half of Unit 12 is suitable black bear habitat. Because grizzly bears are moderately abundant and have been documented as an important source of mortality for black bears of all age classes in other areas of Alaska (Miller 1987), they may limit black bear distribution to areas offering adequate escape cover. Berry species used by black bears in Unit 12 are generally available throughout the unit. Annual berry abundance is directly affected by climate. The Tok wildfire in 1990 burned approximately 156 mi² of prime black bear habitat. Its initial impact on the local black bear population is unknown, but suitable black bear food sources are increasing annually, and based on incidental sightings more black bears are using the area. Similarly, wildfires consumed 434 mi², 28 mi², and 112 mi² in Unit 12 during 2004, 2010, and 2013 respectively, likely improving habitat quality for black bears in the area.

Enhancement

The implementation of the Alaska Interagency Wildland Fire Management Plan (Alaska Wildland Fire Coordinating Group 1998) and the 1990, 2004, 2010, and 2013 wildfires are expected to enhance black bear habitat over the long term in Unit 12. Extensive areas within Unit 12 are currently climax black spruce forest, which have understories nearly devoid of high-quality black bear food. A younger, more diverse habitat mosaic will provide more productive food plants preferred by black bears.

CONCLUSIONS AND RECOMMENDATIONS

We met the management objective of 55% or more males in the harvest ($\bar{x} = 74\%$ males) during RY10–RY12. Black bears in Unit 12 were hunted primarily in the spring by local and nonlocal Alaska residents. Average male skull size was 16.9 inches and has remained consistent since 1980. Black bear meat continues to be an important food source for local residents, particularly in the spring. Based on hunter report data and bear sightings by the public and ADF&G staff, there was no indication that harvest was above sustainable levels. No changes in seasons, bag limits, or management goals and objectives are recommended at this time.

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Table 1. Unit 12 black bear harvest, regulatory years^a 1995 through 2012.

Regulatory year	Reported									Estimated kill		Total reported and estimated kill			
	Hunter kill					Nonhunting kill ^b									
	M	F	Unk	Total	Baited ^c	M	F	Unk	Unreported	Illegal	M (%)	F (%)	Unk	Total	
<i>1995</i>															
Fall 1995	5	3	0	8	0	0	0	0	0	0	5 (63)	3 (38)	0	8	
Spring 1996	17	6	0	23	11	0	0	0	0	0	17 (74)	6 (26)	0	23	
Total	22	9	0	31	11	0	0	0	0	0	22 (71)	9 (29)	0	31	
<i>1996</i>															
Fall 1996	21	2	0	23	0	0	1	0	0	0	21 (88)	3 (13)	0	24	
Spring 1997	14	6	0	20	16	0	0	0	0	0	14 (70)	6 (30)	0	20	
Total	35	8	0	43	16	0	1	0	0	0	35 (80)	9 (20)	0	44	
<i>1997</i>															
Fall 1997	2	2	0	4	0	0	0	0	0	0	2 (50)	2 (50)	0	4	
Spring 1998	30	7	0	37	27	0	0	0	0	0	30 (81)	7 (19)	0	37	
Total	32	9	0	41	27	0	0	0	0	0	32 (78)	9 (22)	0	41	
<i>1998</i>															
Fall 1998	8	3	0	11	0	0	0	0	0	0	8 (73)	3 (27)	0	11	
Spring 1999	19	10	0	29	18	0	0	0	0	0	19 (66)	10 (34)	0	29	
Total	27	13	0	40	18	0	0	0	0	0	27 (68)	13 (33)	0	40	
<i>1999</i>															
Fall 1999	7	2	0	9	0	0	0	0	0	0	7 (78)	2 (22)	0	9	
Spring 2000	13	5	0	18	11	0	0	0	0	0	13 (72)	5 (28)	0	18	
Total	20	7	0	27	11	0	0	0	0	0	20 (74)	7 (26)	0	27	
<i>2000</i>															
Fall 2000	13	3	0	16	0	0	0	0	0	0	13 (81)	3 (19)	0	16	
Spring 2001	18	13	0	31	21	0	1	0	0	0	18 (56)	14 (44)	0	32	
Total	31	16	0	47	21	0	1	0	0	0	31 (65)	17 (35)	0	48	
<i>2001</i>															
Fall 2001	4	5	0	9	0	0	0	0	0	0	4 (44)	5 (56)	0	9	
Spring 2002	10	4	0	14	11	0	0	0	0	0	10 (71)	4 (29)	0	14	
Total	14	9	0	23	11	0	0	0	0	0	14 (61)	9 (39)	0	23	
<i>2002</i>															
Fall 2002	7	2	0	9	0	0	1	0	0	0	7 (70)	3 (30)	0	10	
Spring 2003	17	14	0	31	27	0	0	0	0	0	17 (55)	14 (45)	0	31	
Total	24	16	0	40	27	0	1	0	0	0	24 (59)	17 (41)	0	41	

Regulatory year	Reported									Estimated kill		Total reported and estimated kill			
	Hunter kill					Nonhunting kill ^b									
	M	F	Unk	Total	Baited ^c	M	F	Unk	Unreported	Illegal	M (%)	F (%)	Unk	Total	
<i>2003</i>															
Fall 2003	3	2	0	5	0	0	0	0	0	0	3 (60)	2 (40)	0	5	
Spring 2004	13	4	0	17	15	0	0	0	0	0	13 (76)	4 (24)	0	17	
Total	16	6	0	22	15	0	0	0	0	0	16 (73)	6 (27)	0	22	
<i>2004</i>															
Fall 2004	6	3	0	9	0	2	0	0	0	0	8 (73)	3 (27)	0	11	
Spring 2005	22	7	0	29	18	0	0	0	0	0	22 (76)	7 (24)	0	29	
Total	28	10	0	38	18	2	0	0	0	0	30 (75)	10 (25)	0	40	
<i>2005</i>															
Fall 2005	6	6	0	12	0	0	0	0	0	0	6 (50)	6 (50)	0	12	
Spring 2006	14	13	0	27	20	0	0	0	0	0	14 (52)	13 (48)	0	27	
Total	20	19	0	39	20	0	0	0	0	0	20 (51)	19 (49)	0	39	
<i>2006</i>															
Fall 2006	13	4	1	18	0	0	0	0	0	0	13 (76)	4 (24)	1	18	
Spring 2007	25	7	0	32	28	0	0	0	0	0	25 (78)	7 (22)	0	32	
Total	38	11	1	50	28	0	0	0	0	0	38 (78)	11 (22)	1	50	
<i>2007</i>															
Fall 2007	9	3	0	12	0	0	0	0	0	0	9 (75)	3 (25)	0	12	
Spring 2008	22	12	0	34	25	0	0	0	0	0	22 (65)	12 (35)	0	34	
Total	31	15	0	46	25	0	0	0	0	0	31 (67)	15 (33)	0	46	
<i>2008</i>															
Fall 2008	13	8	0	21	0	0	1	0	0	0	13 (59)	9 (41)	0	22	
Spring 2009	25	11	0	36	25	0	0	0	0	0	25 (69)	11 (31)	0	36	
Total	38	19	0	57	25	0	1	0	0	0	38 (67)	20 (34)	0	58	
<i>2009</i>															
Fall 2009	4	6	0	10	0	0	0	0	0	0	4 (40)	6 (60)	0	10	
Spring 2010	12	5	0	17	10	0	0	0	0	0	12 (71)	5 (29)	0	17	
Total	16	11	0	27	10	0	0	0	0	0	16 (59)	11 (41)	0	27	
<i>2010</i>															
Fall 2010	6	0	0	6	0	1	0	0	0	0	7 (100)	0 (0)	0	7	
Spring 2011	24	5	0	29	6	0	0	0	0	0	24 (83)	5 (17)	0	29	
Total	30	5	0	35	6	1	0	0	0	0	31 (86)	5 (14)	0	36	

Regulatory year	Reported									Estimated kill		Total reported and estimated kill			
	Hunter kill					Nonhunting kill ^b									
	M	F	Unk	Total	Baited ^c	M	F	Unk	Unreported	Illegal	M (%)	F (%)	Unk	Total	
<i>2011</i>															
Fall 2011	6	1	1	8	0	0	1	0	0	0	6 (75)	2 (25)	1	9	
Spring 2012	24	9	0	33	15	0	0	0	0	0	24 (73)	9 (27)	0	33	
Total	30	10	1	41	15	0	1	0	0	0	30 (73)	11 (27)	1	42	
<i>2012</i>															
Fall 2012	9	7	0	16	0	0	0	1	0	0	9 (56)	7 (44)	1	17	
Spring 2013	17	9	0	26	10	0	0	0	0	0	17 (65)	9 (35)	0	26	
Total	26	16	0	42	10	0	0	1	0	0	26 (62)	16 (38)	1	43	

^a Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY95 = 1 July 1995 through 30 June 1996).

^b Includes defense of life or property kills, research mortalities, and other known human-caused accidental mortality.

^c Sealing requirements eliminated in RY10, and baiting information is available only from sealed bears. Baited bears for RY10–RY12 are a minimum count.

Table 2. Total counts^a of blueberries surveyed at 8 sites in Units 12 and 20E between 25 July and 15 August 2000–2012^b.

Year	Location/Unit								Total
	Clearwater (Unit 12) N63°09'	7 mile (Unit 12) N63°12'	Pipeline (Unit 12) N63°15'	RCA (Unit 12) N63°23'	4 mile (Unit 12) N63°21'	9 mile (Unit 20E) N63°24'	Fairplay 1 (Unit 20E) N63°40'	Fairplay 2 (Unit 20E) N63°41'	
	W143°10'	W143°04'	W142°27'	W143°47'	W142°34'	W142°28'	W142°15'	W142°15'	
2000	137	3	19	7	55	51	124	46	442
2001	285	23	278	23	356	400	379	599	2,343
2003	806	24	135	220	676	209	667	996	3,733
2004	164	19	67	6	burned	152	274	358	1,040
2005	630	55	490	238	0	205	199	292	2,109
2006	27	56	47	298	15	24	239	87	793
2007	285	7	47	231	46	999	457	125	2,197
2008	375	31	112	93	352	394	453	269	2,079
2009	447	13	119	167	433	344	382	418	2,323
2010	203	26	157	42	705	189	507	167	1,996
2011	437	45	73	97	770	61	164	56	1,703
2012	186	8	1	9	541	17	n/a	14	776

^a Sum of all blueberries counted on 5 plots at each sample site.

^b No surveys were conducted in 2002 or 2013.

Table 3. Unit 12 black bear hunter residency and success, regulatory years^a 1990 through 2012.

Regulatory year	Successful				Unsuccessful ^b					Total hunters
	Unit resident	Other resident	Nonresident	Total (%)	Unit resident	Other resident	Nonresident	Unk	Total (%)	
1990	15	7	2	24						
1991	10	8	0	18						
1992	26	8	1	35						
1993	21	5	1	27						
1994	26	7	1	34						
1995	18	9	4	31						
1996	32	7	5	44						
1997	30	6	5	41						
1998	25	12	3	40						
1999	18	6	3	27						
2000	30	12	5	47						
2001	12	4	7	23						
2002	23	11	6	40						
2003	10	10	2	22						
2004	22	13	3	38						
2005	12	17	10	39						
2006	21	25	4	50						
2007	27	15	4	46						
2008	20	23	14	57						
2009	11	12	4	27 (28)	28	39	3	0	70 (72)	97
2010	15	16	4	35 (36)	27	32	4	0	63 (64)	98
2011	14	23	4	41 (35)	30	40	6	0	76 (65)	117
2012	21	15	6	42 (30)	39	46	12	0	97 (70)	139

^a Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY90 = 1 July 1990–30 June 1991).

^b Mandatory harvest report cards required beginning in RY09.

Table 4. Unit 12 black bear harvest chronology percent by month, regulatory years^a 1990 through 2012.

Regulatory year	Harvest chronology percent by month								<i>n</i>
	Jul	Aug	Sep	Oct	Nov	Apr	May	Jun	
1990	0	4	21	0	0	0	54	21	24
1991	0	6	6	0	0	0	41	47	17
1992	3	11	20	0	0	3	46	17	35
1993	0	7	7	0	0	0	41	44	27
1994	7	7	10	0	0	0	33	43	34
1995	7	10	10	0	0	0	38	34	29
1996	9	7	36	0	0	0	39	9	44
1997	5	0	5	0	0	0	71	20	41
1998	0	8	20	0	0	0	58	15	40
1999	0	15	19	0	0	0	33	33	27
2000	4	11	19	0	0	2	43	21	47
2001	9	9	17	4	0	0	35	26	23
2002	0	5	18	0	0	2	48	27	40
2003	0	14	9	0	0	0	54	23	22
2004	3	8	13	0	0	3	53	21	38
2005	0	13	18	0	0	0	36	33	39
2006	2	6	26	0	0	0	44	20	50
2007	0	20	7	0	0	0	40	33	46
2008	0	14	23	0	0	0	28	35	57
2009	0	15	15	7	0	0	41	22	27
2010	3	0	14	0	0	0	46	37	35
2011	2	12	5	0	0	2	42	37	41
2012	0	14	24	0	0	0	7	55	42

^a Regulatory year begins 1 July and ends 30 June (e.g., regulatory year 1990 = 1 July 1990–30 June 1991).

Table 5. Unit 12 black bear harvest by transport method, regulatory years^a 1990 through 2012.

Regulatory year	Harvest by transport method (%)									
	Airplane	Horse	Boat	3- or 4-wheeler	Snowmachine	ORV	Highway vehicle	Walking	Unknown	<i>n</i>
1990	1 (4)	1 (4)	2 (8)	3 (13)	0 (0)	0 (0)	12 (50)	0 (0)	5 (21)	24
1991	1 (6)	0 (0)	1 (6)	2 (11)	0 (0)	0 (0)	13 (71)	0 (0)	1 (6)	18
1992	3 (9)	0 (0)	4 (11)	7 (20)	0 (0)	2 (6)	16 (46)	1 (3)	2 (6)	35
1993	1 (4)	0 (0)	1 (4)	9 (36)	0 (0)	1 (4)	11 (44)	1 (4)	1 (4)	25
1994	2 (6)	1 (3)	3 (9)	7 (21)	0 (0)	1 (3)	12 (35)	7 (21)	1 (3)	34
1995	2 (7)	1 (3)	1 (3)	4 (14)	0 (0)	0 (0)	16 (55)	5 (17)	0 (0)	29
1996	5 (11)	1 (2)	2 (5)	8 (18)	0 (0)	0 (0)	19 (43)	6 (14)	3 (7)	44
1997	0 (0)	0 (0)	2 (5)	10 (24)	0 (0)	0 (0)	22 (54)	7 (17)	0 (0)	41
1998	3 (8)	2 (5)	2 (5)	2 (5)	0 (0)	0 (0)	19 (48)	12 (30)	0 (0)	40
1999	5 (19)	1 (4)	1 (4)	6 (22)	0 (0)	0 (0)	11 (41)	3 (11)	0 (0)	27
2000	1 (2)	0 (0)	3 (6)	14 (30)	1 (2)	0 (0)	20 (43)	8 (17)	0 (0)	47
2001	1 (4)	0 (0)	0 (0)	6 (26)	0 (0)	0 (0)	10 (43)	5 (22)	1 (4)	23
2002	3 (8)	0 (0)	1 (2)	19 (48)	0 (0)	0 (0)	8 (20)	7 (17)	2 (5)	40
2003	4 (18)	0 (0)	0 (0)	7 (32)	0 (0)	0 (0)	6 (27)	5 (23)	0 (0)	22
2004	3 (8)	0 (0)	0 (0)	12 (32)	0 (0)	0 (0)	16 (42)	7 (18)	0 (0)	38
2005	2 (5)	0 (0)	1 (3)	15 (38)	0 (0)	0 (0)	12 (31)	9 (23)	0 (0)	39
2006	3 (6)	0 (0)	1 (3)	20 (40)	0 (0)	4 (8)	15 (30)	5 (10)	2 (4)	50
2007	3 (6)	0 (0)	1 (2)	9 (20)	0 (0)	0 (0)	28 (61)	4 (9)	1 (2)	46
2008	9 (16)	1 (2)	2 (4)	26 (45)	0 (0)	0 (0)	8 (14)	11 (19)	0 (0)	57
2009	1 (4)	0 (0)	2 (7)	5 (19)	0 (0)	0 (0)	14 (52)	3 (11)	2 (7)	27
2010	2 (6)	0 (0)	5 (14)	8 (23)	0 (0)	3 (9)	13 (37)	4 (11)	0 (0)	35
2011	1 (2)	2 (5)	4 (10)	10 (25)	0 (0)	1 (2)	14 (34)	9 (22)	0 (0)	41
2012	3 (7)	1 (2)	4 (10)	14 (33)	0 (0)	2 (5)	14 (33)	4 (10)	0 (0)	42

^a Regulatory year begins 1 July and ends 30 June (e.g., regulatory year 1990 = 1 July 1990–30 June 1991).