

Appendix 14

*Community
Consultation
Newsletters*

Development East Tamaki

Catchment Management Plan

Community Newsletter No. 1



What is the Project About?

In June 1999 Manukau City Council adopted the Development East Tamaki (DET) Concept Plan which identifies an urban future for the East Tamaki / Flatbush Area. The East Tamaki area has also been identified in the recently adopted Auckland Regional Growth Strategy as an area where urban growth could occur. The development of a comprehensive catchment management plan is the next step in ensuring that urban development in the East Tamaki area does not adversely impact the environment or the things about your local area that you value.

The Catchment Management Plan will examine a number of issues, including flooding, stream biology and ecology, water quality, infrastructure requirements for growth, regeneration of important natural areas and so on.

Manukau City Council have commissioned consultants Beca Carter Hollings & Ferner to carry out this study.

This newsletter lets you know what the consultants will be doing in the area, and how to get more information.

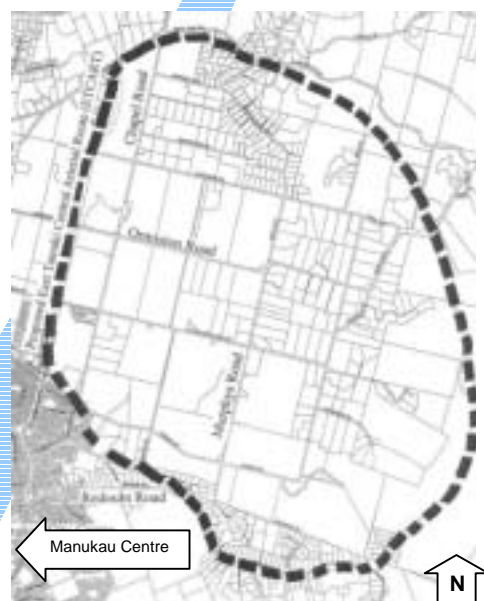


Fig 1: East Tamaki Study Area



Fig 2: Water quality field sampling

What is happening now?

In order to ensure the best possible future for the East Tamaki Area, the consultant team will be out in the field collecting a range of information. Part of this study involves gathering information on the flora and fauna within your local waterways. Over the next few weeks someone may knock on your door to ask if they are able to look at any streams on your property. They will carry a letter of introduction from Council to let you know who they are. All the information gathered will be available over the coming months, and along with your views, will help Council decide how best to protect the values in your area. It is expected that a Catchment Management Plan will be finalised by mid year and will be

used to assist Council to prepare a variation to the District Plan.

We need you to help us.

We would like to hear your views on what catchment management issues are unique and important in the East Tamaki area. This will be invaluable in helping Council complete the Catchment Management Plan. Please write to us, send us an email or visit our web site and tell us what environmental values you would like protected as the area is developed, what concerns you have, and any further information you might like to receive over the remainder of the catchment management plan project?



Te Kaunihera o
MANUKAU
City Council



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Landscape Analysis

A landscape analysis of the East Tamaki catchment has been directed at identification of those elements, features and qualities that might be carried over from the present 'pre-urban' situation into its future urban form. These landscape elements will form the basis for landscape and amenity enhancement, and the retention of a sense of place and identity appropriate to the locality. These features, elements and patterns are divided into two basic groupings: Geophysical components: which contribute to the basic structure of the current environment - terrain, the existence of stream corridors, vegetation; and Amenity characteristics: those components which contribute to landscape patterns, points of interest and focus, and spatial structure which directly influence visual identity and character. Five identity areas have been identified as follows:

- ◆ The Point View Drive Ridge Area - embracing the area east of the Dannemora Estate, the Gracechurch subdivision and Point View Reserve extending towards the Jeffs Rd extension
- ◆ The Redoubt Rd Ridge - extending southwards from Hilltop and Adamson Rd to capture the main ridge and 'roll over' into a pastoral valley that forms part of Totara Park.
- ◆ The Ormiston Rd Saddle - encompassing the lower profiled ridge and rolling sequence of ridges and gullies either side of Ormiston Rd , between the two identity areas already described (see figure below).
- ◆ The East Tamaki Valley - from Murphys Bush Scenic Reserve and Road towards the margins of the 'Ormiston Rd saddle' around the end of McQuoids Rd.
- ◆ The East Tamaki Flats - covering the main alluvial west of Murphys Bush Reserve and Road, extending towards East Tamaki Rd and Springs Roads.



Figure 5: Example of Landscape Identity area – Ormiston Road Saddle

Where to from here?

The next stage of the catchment management plan process is the design of mitigation strategies to address the resource management issues identified, and achieve the important objectives for the catchment, including those related to enhancing stream and terrestrial ecosystems, stormwater management, and land use. A number of further steps and actions will be taken in finalising the catchment management plan, including:

- ◆ Further iwi consultation
- ◆ Finalising an appropriate design solution to mitigate the effects of stormwater;
- ◆ Identifying the costs of managing the urbanisation process, such as costs involved in managing stormwater, replanting riparian areas, providing open space reserves, roading, wastewater systems and so forth;
- ◆ Identifying a basis upon which areas of land are released for development over time; and
- ◆ Identifying appropriate development controls to ensure the objectives for the catchment are achieved.

Your views on the information presented in this newsletter, and the future of the East Tamaki area are valuable in assisting Council formulating a catchment management plan. Please make your views known to us, by writing to the Beca team at the following address.

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C/- Beca Carter Hollings & Ferner	gpollock@beca.co.nz
PO Box 6345	Website
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Development East Tamaki

Catchment Management Plan

Community Newsletter No. 2

Catchment Planning Update

Welcome to the second newsletter, which provides an update on the catchment management planning process currently being undertaken by Beca Carter Hollings & Ferner for Manukau City Council. Significant progress on the catchment management plan has been made over the past three months. Many of you have provided valuable assistance to our scientists while they have been collecting information in the field. Others have written to us and provided comment on the important issues and values in the East Tamaki area. The opening of Te Iirangi Drive has drawn nation-wide attention to the East Tamaki area. The area is also coming under national attention due to the innovative approaches being taken by Manukau City Council to ensure East Tamaki has a sustainable urban future. These approaches include ensuring the East Tamaki area develops in a way which protects and enhances the important stream systems, significant areas of native bush, and which promotes good urban design.

As many of you will be aware, the Beca consultant team have collected a range of information from various locations in the field. Fieldwork has included sampling for fish, and other species, and identifying important stream values. Potential flooding issues have been identified from fieldwork and stormwater modelling. In addition, important landscape and amenity values have been identified. The analysis of these issues, and preliminary strategies to resolve them are presented in this newsletter. This newsletter summarises a report which has been recently prepared for Council which identifies the significant resource management issues to be addressed as the urban future for the catchment is put in place.

The next stage in the catchment planning process, which is currently underway, is to develop innovative design solutions to address the issues presented by urbanising the East Tamaki catchment. Once these design solutions have been tested, a final Catchment Management Plan can be prepared, which will examine issues such as: flooding, stream biology and ecology, water quality, infrastructure requirements for urban growth, and regeneration of important natural areas. The key findings of the Catchment Management Plan will be incorporated in a variation to the Proposed Manukau District Plan, which is currently being prepared by Council for the East Tamaki area.



Te Kaunihera o
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Figure 1: East Tamaki Study Area



Stream Ecology Issues

The stream network within the catchment has been identified as an important ecological system. Samples of fish species and macroinvertebrates taken from the streams have revealed a diverse ecosystem, which is typical of stream systems in the wider Auckland area. Four representative stream and habitat types are present in the East Tamaki catchment upstream of Chapel Road. These are the headwater streams at the top of the catchment, hill valley streams in the mid portion, shallow rolling floodplain streams, and lowland first order streams. All of these stream types have different characteristics, with some being more important than others to the protection and enhancement of in-stream ecology.

Scientists have found six species of fish in East Tamaki streams: shortfin eel, longfin eel, banded kokopu, crans bully, mosquito fish and koi carp. The most widespread and abundant fish is the shortfin eel. The presence of banded kokopu indicates that the streams in the East Tamaki area have important ecological values, and one of the ultimate objectives for managing the stream systems will be to preserve and enhance the kokopu fishery. A range of macroinvertebrates typical of New Zealand streams were also found, including caddis fly, worms, amphipods and the snail. None of the macroinvertebrates found in the streams are rare or threatened. The presence of macroinvertebrates provides a measure of the health of a stream. The numbers and range of macroinvertebrates found in East Tamaki streams indicate that there is moderate pollution throughout the catchment, although this is spread from mild pollution in the headwaters, moderate pollution in the hill valley segments and severe pollution in the lowland rolling streams.



Figure 2: Banded Kokopu

In order to manage the ecological values identified in East Tamaki streams, Council will need to establish management objectives to protect important values. Enhancement of the riparian margins of streams, through weed removal and replanting of suitable native vegetation will be an important part of ensuring the ongoing health of in-stream values.

Biodiversity Issues

A study of the existing known biodiversity in the catchment has also been undertaken. Creating linkages between riparian corridors and other significant existing areas of native vegetation will be one of the key objectives of the design stage of the catchment planning process. The most significant area of vegetation in the catchment is Murphy's Bush, which includes a range of flora and fauna species. A number of threatened native bird species are known to exist in the East Tamaki area, including the New Zealand pigeon (kereru), dabchick, white heron and North Island kaka. The catchment also supports a wide diversity of most common introduced and native bird species due to the range of habitat types in the catchment. A number of management issues arise from an ecological perspective, which will need to be addressed to ensure the biodiversity in the catchment is retained and enhanced. These issues include: excluding stock from areas



Figure 3: Example of a headwater stream.

of bush, plant and animal pest control, linking areas of bush together, enhancing general habitat diversity, and improving the habitat for particular species, such as kereru.

Stormwater Management Issues

Urbanisation of the East Tamaki catchment creates a range of stormwater management issues, including the potential for increased run-off and degraded water quality. The management of stormwater is therefore one of the most important issues in the catchment, as this will determine whether or not the important ecological and land use objectives can be achieved.

The Beca team have developed a stormwater model for the catchment, which identifies the existing and predicted stormwater flows in the catchment. From this model, a range of stormwater management solutions can be developed and tested to mitigate the problems presented by urbanisation.

A number of features of the catchment and its proposed development have a significant impact on the approach to stormwater management. These features include:

- ◆ The poor environmental quality of the Otara Creek and Tamaki estuary 'receiving environment'.
 - ◆ The heavily overgrown and modified nature of existing streams.
 - ◆ The presence of migratory fish, requiring fish passage in the streams from the lower reaches of the catchment to the headwaters.
- The development of an appropriate approach to stormwater management in the catchment is centred around the following key objectives:
- ◆ Managing the volume and peak flow rate of stormwater runoff to avoid flood risk and limit stream erosion
 - ◆ Reducing contaminants in stormwater runoff reaching streams
 - ◆ Retention of runoff in the catchment to assist in enhancing low flows
 - ◆ Protecting and enhancing waterways which have been identified as having high actual or potential ecological value.

◆ Creation of attractive open space corridors associated with the protection of waterways which contribute to an enhancement of urban amenity.

Riparian areas will be central to the proposed stormwater management regime in East Tamaki. Options to manage stormwater, including engineering approaches which are more sensitive to natural catchment features, protection of flood plains and secondary flow paths, and use of a range of stormwater detention and treatment devices such as swales, ponds, and wetlands will be explored in the next stage of the project.

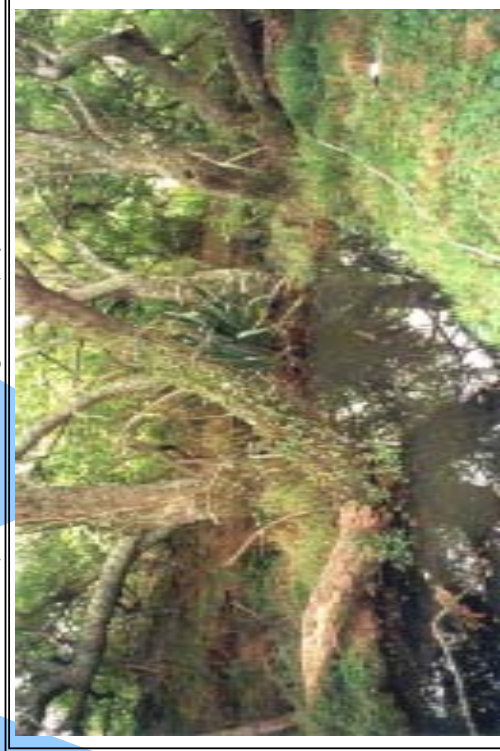


Figure 4: The removal of willows and other noxious plants from stream margins will be a significant and important exercise in some parts of the catchment.

Appendix 15

Landuse

EXISTING LANDUSE

FUTURE LANDUSE

ID	Landuse	Area (hectare)	Totals	ID	Landuse	Area (hectare)	Totals
A1	Pastoral	41.91		A1		7.78	
A1	Rural-Residential	35.84		A1	Conservation etc	8.69	
A1	Vegetation	12.39		A1	Existing Major Public Open Space	10.38	
A1		0.02	90.16	A1	High Intensity Residential	30.46	
A2	Pastoral	57.14		A1	Low Intensity Residential	29.75	
A2	Rural-Residential	0.02		A1	Medium Intensity Residential	3.1	90.16
A2		0.01	57.17	A2		4.56	
A3	Pastoral	61.37		A2	Existing Main Residential	2.32	
A3	Rural-Residential	1.49	62.86	A2	High Intensity Residential	46.3	
A4	Pastoral	48.24		A2	Conservation etc	3.95	
A4		0.2		A2	Low Intensity Residential	0.01	57.14
A4	Industrial/Commercial	18.08	66.52	A3		4.79	
A5	Industrial/Commercial	0.77		A3	Conservation etc	0.94	
A5	Pastoral	9.04		A3	Existing Major Public Open Space	0.68	
A5		0.02	9.83	A3	High Intensity Residential	33.2	
A6	Industrial/Commercial	16.18		A3	Low Intensity Residential	1.52	
A6	Pastoral	38.62	54.80	A3	Medium Intensity Residential	0.96	
A7	Public Open Space	9.17		A3	Urban Park	20.78	62.87
A7	Residential	39.1		A4	Existing Main Residential	5.87	
A7	Industrial/Commercial	36.18		A4		11.29	
A7	Pastoral	5.03	89.48	A4	Business	45.97	
B1	Pastoral	83.42		A4	Existing Major Public Open Space	0.21	
B1	Vegetation	9.46	92.88	A4	Existing School	1.1	
B10	Pastoral	41.29		A4	High Intensity Residential	1.78	
B10	Rural-Residential	28.63		A4	Conservation etc	0.25	66.47
B10	Vegetation	1.36	71.28	A5	Business	8.35	
B11	Pastoral	67.69	67.69	A5		0.67	
B12	Pastoral	25.08	25.08	A5	Existing Major Public Open Space	0.79	9.81
B13	Pastoral	23.41	23.41	A6		2.51	
B14	Pastoral	19.88		A6	Business	52.3	54.81
B14	Industrial/Commercial	1.12	21.00	A7		12.65	
B2	Pastoral	87.62		A7	Business	32.57	
B2	Rural-Residential (undeveloped)	9.02		A7	Existing Main Residential	32.63	

B2	Vegetation	23.42	120.06	A7	Existing Major Public Open Space	11.57	
B3	Pastoral	42.26		A7	Existing School	0.09	89.51
B3	Vegetation	5.14	47.40	B1	Conservation etc	40.33	
B4	Pastoral	39.64		B1	Low Intensity Residential	47.11	
B4	Rural-Residential	4.58		B1	Medium Intensity Residential	0.52	
B4	Rural-Residential (undeveloped)	27		B1		4.93	92.69
B4	Vegetation	14.63		B10	Conservation etc	10.89	
B4		0.01	85.86	B10	High Intensity Residential	29.6	
B5	Pastoral	26.68		B10		3.28	
B5	Vegetation	6.62	33.30	B10	Existing Major Public Open Space	3.28	
B6	Rural-Residential	10.64		B10	Low Intensity Residential	19.24	
B6	Pastoral	44		B10	Medium Intensity Residential	5.01	71.3
B6	Vegetation	20.9		B11	Urban Park	5.93	
B6		0.04	75.58	B11		4.22	
B7	Pastoral	74.49		B11	Conservation etc	2.02	
B7	Vegetation	4.68	79.17	B11	Existing School	2.42	
B8	Pastoral	60.11		B11	High Intensity Residential	52.79	
B8	Vegetation	6.46	66.57	B11	Existing Major Public Open Space	0.1	
B9	Pastoral	148.03		B11	Medium Intensity Residential	0.2	67.68
B9	Rural-Residential	2.5		B12		0.84	
B9	Vegetation	11.12	161.65	B12	Conservation etc	0.32	
C1	Pastoral	50.91		B12	High Intensity Residential	4.58	
C1	Rural-Residential	50.54		B12	Urban Park	19.34	25.08
C1	Rural-Residential (undeveloped)	4.25		B13		2.94	
C1	Vegetation	16.59		B13	Business	2.08	
C1		0.06	122.35	B13	Conservation etc	5.6	
C2	Pastoral	51.33		B13	High Intensity Residential	8.14	
C2	Vegetation	14.73	66.06	B13	Urban Park	4.62	23.38
C3	Pastoral	40.3		B14	Business	20.09	
C3	Vegetation	10.85		B14		0.6	
C3	Rural-Residential (undeveloped)	4.92		B14	High Intensity Residential	0.31	21
C3		0.01	56.08	B2		11.39	
C4	Pastoral	40.82	40.82	B2	Conservation etc	51.15	
C5	Pastoral	52.12		B2	Low Intensity Residential	49.68	
C5	Residential (undeveloped)	1.69		B2	Medium Intensity Residential	7.82	120.04
C5	Rural-Residential	0.01		B3		3.33	

C5	Rural-Residential (undeveloped)	3.69	57.51	B3	Conservation etc	11.28
C6	Pastoral	37.53	37.53	B3	Medium Intensity Residential	30.11
C7	Pastoral	20.49	20.49	B3	Low Intensity Residential	2.69
D1	Pastoral	39.7		B4		13.22
D1	Residential	21.65		B4	Conservation etc	29.19
D1	Residential (undeveloped)	5.03	66.38	B4	Low Intensity Residential	41.13
D2	Pastoral	19.58	19.58	B4	Medium Intensity Residential	2.32
E1	Pastoral	60.58		B5		0.35
E1	Residential	21.87		B5	Conservation etc	14.59
E1	Residential (undeveloped)	11.43		B5	Medium Intensity Residential	18.36
E1	School	5.02		B6		4.51
E1	Industrial/Commercial	2.88		B6	Conservation etc	24.23
E1	Rural-Residential	8.29		B6	Medium Intensity Residential	28.23
E1	Rural-Residential (undeveloped)	0.59	110.66	B6	Low Intensity Residential	18.61
E10	Public Open Space	1.7		B7	Conservation etc	21.14
E10	Residential	12.9		B7	High Intensity Residential	0.85
E10	School	0.03	14.63	B7	Medium Intensity Residential	53.85
E11	Public Open Space	3.47		B7		3.33
E11	Residential	108.26		B8		4.11
E11	Industrial/Commercial	0.46		B8	Conservation etc	13.64
E11	Motorway	7.64		B8	High Intensity Residential	26.79
E11	School	2.23	122.06	B8	Medium Intensity Residential	22.03
E12	Industrial/Commercial	24.33		B9		8.52
E12	Public Open Space	17.25		B9	Conservation etc	30.58
E12	Residential	26.53		B9	High Intensity Residential	32.32
E12	School	4.47		B9	Medium Intensity Residential	83.41
E12	Special Purposes	3.14	75.72	B9	Low Intensity Residential	6.8
E2	Pastoral	56.57		C1		6.67
E2	Public Open Space	7.39		C1	Conservation etc	23.27
E2	Residential	78.09		C1	High Intensity Residential	14.32
E2	School	22.85		C1	Low Intensity Residential	56.09
E2	Industrial/Commercial	5.61	170.51	C1	Medium Intensity Residential	22.01
E3	Pastoral	1.04		C2		3.34
E3	Public Open Space	2.54		C2	Conservation etc	17.26
E3	Residential	55.99		C2	Existing Major Public Open Space	9.79
E3	School	0.03	59.60	C2	High Intensity Residential	24.22

E1	Existing School	4.86
E1	High Intensity Residential	5.51
E1	Business	2.52
E1	Low Intensity Residential	7.97
		<u>110.68</u>
E10	Business	2.23
E10	Existing Main Residential	0.25
E10	Existing Major Public Open Space	10.57
E10	Existing School	1.53
		<u>14.61</u>
E11	Existing Main Residential	27.3
E11	Existing Major Public Open Space	88.26
E11	Business	3.4
E11	Existing School	0.87
		<u>122.09</u>
E12	Existing Major Public Open Space	14.78
E12	Business	16.11
E12	Existing Main Residential	22.1
E12	Existing School	18.26
		<u>75.72</u>
E2	Business	19.83
E2	Existing Main Residential	30.82
E2	Existing Major Public Open Space	64.81
E2	Existing School	32.01
		<u>170.5</u>
E3	Existing Main Residential	11.55
E3	Existing Major Public Open Space	45.83
E3	Existing School	1.95
		<u>59.58</u>
E4	Existing Main Residential	8.75
E4	Existing Major Public Open Space	31.31
		<u>41.05</u>
E5	Existing Main Residential	15.15
E5	Existing Major Public Open Space	39.62
E5	Business	4.31
E5	Existing School	2.29
		<u>67.89</u>

E6		7.3
E6	Business	0.06
E6	Existing Main Residential	20.7
E6	Existing Major Public Open Space	2.21
E6	Existing School	0.43
		<u>30.7</u>
E7		17.66
E7	Existing Main Residential	37.8
E7	Existing Major Public Open Space	24.72
E7	Business	14.04
E7	Existing School	0.24
		<u>94.46</u>
E8		18.61
E8	Business	0.91
E8	Existing Main Residential	62.79
E8	Existing Major Public Open Space	1.66
E8	Existing School	2.37
		<u>86.34</u>
E9		22.49
E9	Business	2.65
E9	Existing Main Residential	86.96
E9	Existing Major Public Open Space	8.65
E9	Existing School	13.49
		<u>134.24</u>
		2896.32
		<u>2896.32</u>

Appendix 16

*Maintenance
Costs for
Stormwater
Ponds*

Year	Plant	Volume	Cost	Substation ¹	Area served by Ponds ha	Water Quality Volume m ³	Annual Average Sediment Removal	Single removal cost	First year of second year removal	15	Annual Average Grounds Maintenance	Year	Increase in year Annual Cost	Average Total Annual Cost	Cleaning cost per year	Grounds Increase in year	Grounds Mical Annual Cost	Total Annual Cost
2003	D1A	9400	\$245.00	D1A	11.84	2100	1200	18000	2008	2023	1500	2003	23800	23800	0	9500	9500	9500
2003	D2A	31000	\$687.00	D2A	53.10	9000	4500	67500	2008	2023	5300	2004	6100	29900	0	2800	12300	12300
2003	E1A	57800	\$1,235.00	E1A	110.67	17600	8600	129000	2008	2023	4700	2005	8300	38200	0	3900	16200	16200
2004	A2A	26000	\$585.00	A2A	37.46	6400	3300	49500	2009	2024	2800	2006	3700	41900	0	2300	18500	18500
2005	A2B	3400	\$123.00	A2B	3.40	700	400	6000	2010	2025	800	2007	3900	45800	0	2000	20500	20500
2005	A3B	38200	\$834.00	A3B	46.38	7900	4000	60000	2010	2025	3100	2008	4300	50100	214500	2600	23100	237600
2006	A1A	7700	\$210.00	A1A	9.95	1800	1000	15000	2011	2026	1400	2009	14300	64400	49500	7300	30400	79800
2006	A1B	3400	\$123.00	A1B	4.03	700	400	6000	2011	2026	900	2010	14300	78700	66000	6800	37200	103200
2007	A3A	14200	\$343.00	A3A	19.99	3300	1900	28500	2012	2027	2000	2011	2400	81100	21000	1400	38600	59600
2008	B10C	7100	\$198.00	B10C	10.04	1800	1000	15000	2013	2028	1400	2012	9800	90900	28500	4800	43400	71900
2008	B13A	6200	\$180.00	B13A	7.14	1300	700	10500	2013	2028	1200	2013	8800	99700	25500	3600	47000	72500
2009	B10A	15700	\$374.00	B10A	19.89	3500	1800	27000	2014	2029	2000	2014	3100	102800	105000	1700	48700	153700
2009	B10B	5600	\$168.00	B10B	8.38	1300	800	12000	2014	2029	1300	2015	14700	117500	112500	6900	55600	168100
2009	B11B	32700	\$722.00	B11B	47.13	8100	4000	60000	2014	2029	3100	2016	9200	122700	15000	3100	58700	73700
2009	B9F	3400	\$123.00	B9F	3.80	700	400	6000	2014	2029	900	2017	15600	138300	75000	8000	66700	141700
2010	B11A	49700	\$1,069.00	B11A	51.75	8700	4400	66000	2015	2030	3200	2018	7500	145800	78000	4300	71000	149000
2010	B9B	17200	\$405.00	B9B	24.72	4300	2200	33000	2015	2030	2200	2019	9300	155100	21000	5500	76500	97500
2010	B9E	8000	\$217.00	B9E	9.19	1700	900	13500	2015	2030	1400	2020	15000	170100	117000	8200	84700	201700
2011	C6B	8000	\$217.00	C6B	10.35	1700	1000	15000	2015	2031	1400	2021	0	170100	31500	0	84700	118200
2012	B8B	21800	\$499.00	B8B	30.83	5400	2700	40500	2017	2032	2500	2022	8200	178300	114000	4700	89400	203400
2012	B9D	19900	\$460.00	B9D	25.30	4500	2300	34500	2017	2032	2300	2023	4100	182400	262400	2100	91500	354000
2013	B9C	40600	\$883.00	B9C	62.99	10400	5200	78000	2018	2033	3600							
2014	B9A	11800	\$294.00	B9A	14.07	2300	1400	21000	2019	2034	1700		182400		63843			
2015	C4A	7700	\$210.00	C4A	8.93	1600	900	13500	2020	2035	1300							
2015	C5A	30500	\$677.00	C5A	57.49	8900	4600	72000	2020	2035	3400							
2015	C6A	15700	\$374.00	C6A	23.04	3800	2100	31500	2020	2035	2200							
2016	C3B	11500	\$288.00	C3B	15.27	2600	1500	22500	2021	2036	1800							
2016	C3C	1100	\$76.00	C3C	1.29	300	200	3000	2021	2036	500							
2016	C3D	3100	\$116.00	C3D	3.40	600	400	6000	2021	2036	800							
2017	B3C	16200	\$384.00	B3C	21.84	3500	2000	30000	2022	2037	2100							
2017	B8A	14100	\$341.00	B8A	18.66	3000	1700	25500	2022	2037	1900							
2017	C1C	24500	\$554.00	C1C	31.18	5100	2800	42000	2022	2037	2500							

