



DATE: April 9, 2018

AGENDA ITEM # 4

TO: Environmental Commission

FROM: J. Logan, Staff Liaison

SUBJECT: Review and Discuss 2017/18 Environmental Commission Goals and Work Plan and Prepare Annual Report to Council at May 1, 2018 Joint Meeting

RECOMMENDATION:

Review the Work Plan and update accordingly; finalize report to Council of Accomplishments of 2017/18 and Goals for 2018/19

BACKGROUND

The Environmental Commission met with the City Council on May 2, 2017 to review its 2016/17 Environmental Commission Accomplishments and Draft 2017/18 Goals and discuss issues and projects for the upcoming year. Based on this discussion, the Goals were finalized and the 2017/18 Work Plan was developed and approved by Council. The approved Work Plan is intended to focus the Commission's agenda items and will serve as a roadmap for projects and activities for the year. In preparation for its joint meeting with City Council on May 1, 2018, the Environmental Commission began to review its 2017/18 accomplishments and 2018/19 goals at its February 12, 2018 meeting.

DISCUSSION

Environmental Commission Goals and resulting Work Plan development targeted for 2017/18 are:

1. Climate Action Plan and Community Choice Energy
2. Water Conservation and stormwater management
3. Solid waste diversion
4. Visioning process
5. Community outreach
6. Special projects as assigned by Council

The Commission will continue discussion and finalize the Accomplishments for its annual 2017/18 Report and finalize development of its 2018/19 Work Plan for discussion with Council at the Joint meeting on May 1, 2018 to be held at 8:15 pm in Room 2, Hillview Community Center.

Attachments:

- A. April 9, 2018- 2017/2018 Goals and Work Plan
- B. Idling Survey and Anti-Idling materials
- C. DRAFT Report to Council with Environmental Commission 2017/18 Accomplishments and DRAFT 2018/19 Work Plan

ENVIRONMENTAL COMMISSION

2017/18 Work Plan

April 9, 2018

Goal	Projects	Assignments	Target Date	City Priority related to	Status
Climate Action Plan & CCE	Community outreach and education for the implementation of CCE and SVCEA	<ul style="list-style-type: none"> Speakers and SVCE staff outreach efforts for residential and business (Bray, Teksler, Hedden) Customer Program Advisory Group (CPAG) V.C. Weiden 	Ongoing	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Downtown Green event, August 20, 12-4pm; 8/2 & 8/4 Senior Center presentation by SVCEA staff Attend CPAG meetings (first meeting 1.17.18)
	Resource to Director Bruins	<ul style="list-style-type: none"> Policy & Program guidance (Teksler, Hedden, Weiden) 	Monthly	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Review SVCE packet and recommendations to Director Bruins as needed; request specific clarification from Dir. Bruins MAWG rep to update Dir. Bruins ahead of BOD meetings as needed
	Partner with Community Development	<ul style="list-style-type: none"> Staff 	Monthly	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Attend MAWG rep with Community Development staff
	Energy efficiency measure for community	<ul style="list-style-type: none"> Commission to explore and research programs offered by PG&E, Acterra, Energy Upgrade California, CA First (Hedden) 	Oct. 2017 workshop with SCCo Office of Sustainability	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Home Upgrade Workshop on Oct. 18, 2017 (approx. 40 attendees, welcomed by Weiden) PG&E streetlight replacement beginning late September 2017
	Research best practice for green building codes and planning requirements	<ul style="list-style-type: none"> Commission to engage with staff to research and recommend areas to be reviewed (EV, solar installs, green building measures) (Yuan, Teksler, Halkola) 	Final report approved; sent to CD staff for review and comments	Climate Action Plan Goals and CCE-SVCE implementation New community center	<ul style="list-style-type: none"> Initial Staff meeting Aug. 16, 2017 Staff shared report with SVCE MAWG at Sept 27, 2017 meeting Application to building of new community center

Climate Action Plan & CCE (cont.)	With staff, support opportunities for CAP GHG reduction measures.	<ul style="list-style-type: none"> Commission to support staff's efforts to update CAP with inventory & review of measures 	annual	Climate Action Plan Goals and CCE-SVCE implementation	CAP Report with analysis of measures and data in CIP Budget; staff attend Member Agency Work Group (MAWG) meetings.
	Environmental Resources Dashboard	<ul style="list-style-type: none"> Review and enhance GHG reporting and data on Green Initiatives pages of City website (Bray, Eyre, Halkola) 	In process	Climate Action Plan Goals and CCE-SVCE implementation	Data collection ongoing. Dashboard updated with data through 2015, 2016 if available
	Anti-Idling Effort	<ul style="list-style-type: none"> Subcommittee formed (Hedden, Yuan, Weiden) 	Discussion on 8-14-17; Meeting with staff 8-25-17; Update 9-11-17; Meeting with staff 9-18-17; Update 10-9-17; Update 11-13-17;12-11-17; 1-8-18; 2-12-18	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Research existing ordinances and enforcement Research educational campaign Discuss regional education effort Outreach to identified partners Implement survey at selected locations
Water Conservation & Stormwater Management	Support community and municipal drought related measures	<ul style="list-style-type: none"> Reported by (Eyre) Track water usage via ER Dashboard (Eyre, Bray) Support staff in development of green infrastructure measures (Eyre) 	Summer/Fall focus with ongoing review	Water Conservation Resolution 2015-15	<ul style="list-style-type: none"> Monitor water use Update drought website CalWater presentation 9-11-17
	Stormwater management/shoulder paving policy	<ul style="list-style-type: none"> Assist staff and review development of storm water plans and reporting (Weiden, Bray, Halkola) 	Subcommittee meetings, staff reports	Stormwater Master Plan and Water Conservation	Shoulder paving policy revisions

ATTACHMENT A

<p>Solid Waste Diversion</p>	<p>Review of progress toward diversion goals Focus on composting</p>	<ul style="list-style-type: none"> • MTWS Annual review • Explore opportunities with staff for public outreach (Weiden, Yuan) 	<p>Compost available for community at Sunnyvale SMaRT Station</p> <p>MTWS to provide compost to community at MSC or other Los Altos location in Spring 2018</p>	<p>Recycling and diversion</p>	<ul style="list-style-type: none"> • Compost to made available at MSC Spring 2018 • Update on event recycling- add events to CM weekly updates • MTWS update March 12, 2018
<p>Visioning Process</p>	<p>Provide environmental perspective to assist visioning process</p>	<ul style="list-style-type: none"> • TBD (Name of Commissioner assigned) 	<p>New community center design - ongoing</p>	<p>Provide support to Task Force and Council on natural and built environment</p>	<ul style="list-style-type: none"> • Participate in discussion on environmental impacts • Recommendations sent to Task Force • City Council supported recommendation to upgrade to LEED Gold equivalent • EC to support zero net carbon (ZNC), all-electric building (ZNE) over LEED Gold equivalent • Advocate for mechanical engineer on design team with experience designing all-electric building • Participate in LEED Charrette– 3-22-18
<p>Community Outreach</p>	<p>Support project implementation by public outreach and education efforts</p>	<ul style="list-style-type: none"> • City webpages; social media; engage with community groups (Name of Commissioner assigned) • Invite speakers to EC meetings on Work Plan related topics (All Commissioners) 	<p>Ongoing</p>	<p>Public outreach and education</p>	<p>Partnership with GTLA, SVCEA, community non-profits, community organizations, County Office of Sustainability</p>

ATTACHMENT A

	Gas-powered leaf-blower ban review	Commission to review gas-powered leaf-blower ban enforcement data and consider potential outreach/educational campaign (Teksler)	Ongoing	Public outreach and education	Received historical memo from staff; reviewing enforcement data and discussing educational campaign with staff 1-8-18; potential subcommittee formation pending data review.
Special Projects	As assigned by Council	Research and report on membership for City in Mayor's National Climate Action Agenda	July 2017	Climate Action Plan. Request from Mayor Prochnow	Mayor signed letter; Commissioner Weiden to follow activities of the organization
		Research and report on Santa Clara County Climate Resolution	When directed by City Council	Climate Action Plan. Request from City Council	EC reviewed and compared County Resolution and Resolution for Climate Restoration and will provide recommendation at future date, if directed

April 4, 2018

To: Environmental Commission

From: Anti-Idling Subcommittee (Lei Yuan, Don Weiden)

Subject: Anti-Idling Subcommittee Report

I. Activities since appointment by the Environmental Commission on August 14, 2017:

- August 25, 2017 Gary Hedden and Don Weiden met with Jay Logan and Sarah Henricks – Discussed and identified items to be investigated.
- September 1, 2017 Gary Hedden, Lei Yuan and Don Weiden met with Sarah Hendricks – Continued discussion of items to be investigated. The City has the ability to post anti-idling signs without an ordinance if approved by Public Works.
- September 6, 2017 Lei Yuan met with Sybil Cramer of the Los Altos High School Green Team and Cheryl Weiden – Sybil stated that the Green Team selects their activities. Sybil would like to see City direction so that School District will take action including posting signs and enforcing anti-idling.
- September 11, 2017 – Subcommittee report to Environmental Commission.
- September 18, 2017 met with Jay Logan and Sarah Henricks – Custom signs would cost \$200 to \$250 each depending on size and graphics. Installation cost could be at nominal if done by City crews on existing posts. The Chief of Police met with the Los Altos High School Superintendent and found support for educational efforts and inclusion in Drivers Education program. Gary Hedden contacted Joe Simitian's office and found his staff willing to discuss and evaluate the subject. Simitian's staff later encouraged continuing grassroots efforts on anti-idling, although the staff would not pick this issue up at this time.
- October 9, 2018 – Subcommittee report to Environmental Commission. Environmental Commission authorized conducting surveys.
- November 13, 2018 – Oral report to Commission. Survey of Rancho Shopping Center, Hillview/Civic Center and Main Street/State Street completed 11/9, 11/10 and 11/11.
- December 11, 2018 – Oral report to Commission. Survey at Los Altos High School completed 12/1, 12/4 and 12/5.
- January 8, 2018 – Oral report to Commission. Surveys at K – 8 schools to be scheduled after Solar installations are complete.
- February 12, 2018 – Oral report to Commission. Survey at Pinewood School done by Pinewood students 1/23, 1/24 & 1/25. Aimi Wen spoke of Pinewood students' interest in anti-idling and interest expressed at High School Environmental Group summit on 1/27.
- March 12, 2018 – Oral report to Commission. Surveys at K – 8 schools are scheduled, Covington during week of 3/19, Santa Rita during week of 3/26, Blach during week of April 2 and Gardner-Bullis during the week of 4/16.

II. Idling Survey Results

LOCATION	SURVEY TIME MINUTES	IDLING MINUTES OBSERVED	OCCUPIED VEHICLES WAITING	VEHICLES IDLING 1+ MINUTES	AVERAGE IDLING MINUTES PER DAY
RANCHO S CTR	172	111	Did not count	33	37
HILLVIEW/CIVIC C	83	12	Did not count	6	4
MAIN/STATE STS	202	66	Did not count	24	22
LOS ALTOS HS	519	1080	431	141	360
PINEWOOD	160	611	259	154	204
COUVINGTON	209	1244	222	142	415
SANTA RITA	200	1986	378	285	662
BLACH (Partial)	95	305	212	75	106
GARDNER-BULLIS	Scheduled for	4/16 – 4/18			

A one-page summary of data collected at each location is attached to the end of this report

III. Idling Survey Observations

1. Surveys at Schools

- a. Some vehicles arrive for student pickup 30+ minutes prior to student discharge and idle the entire time.
- b. Survey recorded idling only in specific zones in the school entry / exit loop from sidewalks. Idling within parking lots, on streets and adjacent areas waiting to enter the school entry / exit loop or waiting for students to walk to the waiting vehicles was significant (probably greater than the surveyed zones) and was not recorded.
- c. Weather was mild on the survey days so Idling was not required for comfort within vehicles.
- d. Activities while idling included activities on mobile devices and talking. Some even exited their vehicle to talk with other adults while their vehicle idled.
- e. School busses turned off their engines.
- f. Pick-up service providers (vans) generally idled their vehicles.
- g. The vast majority of vehicles waiting in the student pickup lane at K-6 schools idled.

2. Surveys at Locations other than Schools

- a. When entering or leaving parking spaces, individuals often become distracted with mobile devices and idle.
- b. Idling occurs when driver waits for a passenger to run an errand in a store.
- c. Idling occurs when food is brought into and consumed in the vehicle.

3. General

- a. More than a majority of occupied vehicles idle while parked.
- b. Generally, vehicle occupants seem unaware and not concerned about idling.
- c. Survey work generated interest in anti-idling among high school students and K – 8 student's parents.

IV. Benefits of Reducing Voluntary Vehicle Idling in Los Altos

1. Estimated prevention of MT CO₂ for Los Altos from the Voluntary Vehicle Idling Study.
 - a. An idling vehicle emits approximately 1.4g of CO₂ per second, Reference Vanderbilt paper Article 4.1, Therefore, 455 kilograms of CO₂ emission ($1.4 \times 60 \times 5,415 = 454,860$) was observed.
 - b. Based on the survey data and a number of assumptions, MT CO₂ from voluntary vehicle idling in Los Altos most likely exceeds 94 MT CO₂. Schools exceed 66 MT CO₂: 180 school days per year, 9 public schools in Los Altos with surveyed average idling of 350 minutes per day, 7 private schools in Los Altos with assumed average idling of 175 minutes per day. Commercial and civic areas most likely exceed 28 MT CO₂: 261 commercial/civic days per year, 4 times the survey observed idling minutes per day, 5 times the survey area for the total Los Altos commercial and civic area. Los Altos total most likely exceeds 94 MT CO₂ (66 + 28).
2. Estimated prevention of MT CO₂ for Los Altos Voluntary Vehicle Idling derived from various studies ranged from 47 to 542 MT CO₂.
 - a. City of Palo Alto Colleagues Memo dated August 28, 2017 – Factoring private vehicle estimate of MT CO₂ prevented by population of Los Altos to population of Palo Alto yields 271 to 542 MT CO₂.
 - b. Vanderbilt University Paper titled Costly myths: An analysis of idling beliefs and behavior in personal motor vehicles and dated March 4, 2009 – Factoring private vehicle estimate of MT CO₂ prevented by number of private vehicles in US to number of vehicles in Los Altos yields 390 MT CO₂.
 - c. Improving Toronto's Idling Control Bylaw, McKowen, Toronto Medical Officer of Health, Environmental Protection, 2010, page 6 – Factoring Toronto's estimate of total idling MT CO₂ by population of Los Altos to population of Toronto yields 1,164 MT CO₂. This is approximately 43% of the total idling MT CO₂ estimated in #1 and 12% of that estimated in #2 and results in estimated prevention of 47 to 234 MT CO₂.
3. Environmental Benefits of Reducing Voluntary Vehicle Idling in Los Altos
 - a. Would reduce CO₂ emissions and help Los Altos meet its Climate Action Plan (CAP) Greenhouse Gas Target. Of the 43 measures identified in the Los Altos CAP, the reduction in unnecessary idling would rank between 12th and 21st.
 - b. Would reduce the concentration of chemicals hazardous to human health in the air we breath at our schools, public gatherings, recreation events, shopping locations and outside/sidewalk dining locations.
 - c. Would set a standard of good practice and demonstrate leadership for others to follow, magnifying the positive environmental impacts.
4. Economic Benefits of Reducing Voluntary Vehicle Idling in Los Altos
 - a. Reduce vehicle maintenance costs. Idling a vehicle is harder on the vehicle's engine, electrical and mechanical systems than turning the vehicle off and on.
 - b. Save fuel costs. Idling passenger vehicles or light duty trucks consume between 0.32 and 0.71 gal/hr of gasoline. If the City's fleet of 71 vehicles idled unnecessarily for 15 minutes per day with gasoline at \$3.50 per gallon the wasted fuel would total approximately \$10,000 per year.

V. Next Steps

1. Discuss survey results.
2. Consider possible Environmental Commission recommendations.
 - a. Develop an Anti-Idling Ordinance
 - b. Incorporate Anti-Idling into Climate Action Plan Implementation Work Plan Update
 - c. Develop a Community Anti-Idling Education Campaign
 - d. Develop Anti-Idling policy for City Vehicle Fleet
 - e. Cease further work on Anti-Idling
 - f. Other action
3. Recommend and present next step(s) to City Council on May 1st as part of the Environmental Commission's work plan.
4. Report survey results to K – 8 School District, High School and Pinewood.
5. Encourage others to move forward on anti-idling as a grassroots activity

Idling Survey Results														
Blach Middle Rita School														
Revised 04/03/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 2	4/5/2018	Thursday	14:40	15:30										
Zone 3	4/5/2018	Thursday	14:40	15:30										
Subtotal														
TOTALS					16	19	10	7	23	95	305	212	75	
Notes														
1. Survey area was the Blach Middle School entry/exit loop. Survey takers were assigned specific zones and recorded activity within his or her assigned zone. Therefore, a specific car could have been recorded idling in more than one zone.														
2. Electric vehicle idling not included.														
3. Idling was only recorded during the noted survey times.														
4. An idling vehicle emits approximately 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, xxx kilograms of CO2 emission (1.4 x 60 x yyy = zzzzz) was observed														

Idling Survey Results														
Couvington School														
Revised 03/23/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 1	3/21/2018	Wednesday	14:05	15:15	5	3	1		16		234		25	Cloudy, 66F, Note the 16 vehicles observed idling 5+ min, 3 idled 6+ min, 1 idled 7+ min, 2 idled 8+ min, 1 idled 9+ min, 1 idled 10+ min, 1 idled 12+ min, 3 idled 15+ min, 1 idled 21+ min, 2 idled 22+ min and 1 idled 40+ min, total of 222 min of idling
Zone 2	3/21/2018	Wednesday	14:05	15:15	1	3			7		89		11	Cloudy, 66F, Note the 7 vehicles observed idling 5+ min, 1 idled 6+ min, 1 idled 10+ min, 3 idled 11+ min, 1 idled 16+ min and 1 idled 17+ min, total of 82 min of idling
Subtotal					6	6	1		23	70	323	64	36	
Zone 1	3/22/2018	Thursday	13:03	14:10	1	1	1	3	24		248		30	Cloudy, Drizzles, 54F, Note the 24 vehicles observed idling 5+ min, 1 idled 5+ min, 2 idled 6+ min, 3 idled 7+ min, 4 idled 8+ min, 1 idled 9+ min, 7 idled 10+ min, 4 idled 13+ min, 1 idled 14+ min, and 1 idled 15+ min, total of 230 min of idling
Zone 2	3/22/2018	Thursday	13:03	14:10	6	5	1		10		242		22	Cloudy, Drizzles, 54F, Note the 10 vehicles observed idling 5+ min, 2 idled 6+ min, 1 idled 10+ min, 1 idled 11+ min, 1 idled 12+ min, 2 idled 13+ min, 1 idled 17+ min, and 2 idled 23+ min, total of 222 min of idling
Zone 3	3/22/2018	Thursday	13:03	14:10		2	1		1		26		4	Cloudy, Drizzles, 54F, Note the vehicle observed idling 5+ min idled for 19 min, total of 19 min of idling
Subtotal					7	8	3	3	35	67	516	85	56	
Zone 1	3/23/2018	Friday	14:05	15:17	2	2		3	17		151		24	Partly Cloudy, 59F, Note the 17 vehicles observed idling 5+ min, 2 idled 5+ min, 4 idled 6+ min, 1 idled 7+ min, 3 idled 8+ min, 4 idled 9+ min, 2 idled 10+ min, and 1 idled 12+ min, total of 133 min of idling

Idling Survey Results														
Couvington School														
Revised 03/23/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 2	3/23/2018	Friday	14:05	15:17	3	3	1		13		197		20	Partly Cloudy, 59F, Note the 13 vehicles observed idling 5+ min, 1 idled 6+ min, 2 idled 8+ min, 2 idled 9+ min, 1 idled 10+ min, 2 idled 12+ min, 1 idled 13+ min, 1 idled 14+ min, 1 idled 17+ min, 1 idled 20+ min and 1 idled 47+ min, total of 185 min of idling
Zone 3	3/23/2018	Friday	14:05	15:17	2				4		57		6	Partly Cloudy, 59F, Note the 4 vehicles observed idling 5+ min, 1 idled 5+ min, 1 idled 7+ min, 1 idled 13+ min and 1 idled 30+ min, total of 55 min of idling
Subtotal					7	5	1	3	34	72	405	73	50	
TOTALS					20	19	5	6	92	209	1244	222	142	
Notes														
1. Survey area was the Couvington School entry/exit loop and first isle of parking. Survey takers were assigned specific zones and recorded activity within his or her assigned zone. Therefore, a specific car could have been recorded idling in more than one zone.														
2. Electric vehicle idling not included.														
3. Idling was only recorded during the noted survey times.														
4. An idling vehicle emits approximately 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, 104.5 kilograms of CO2 emission (1.4 x 60 x 1244 = 104,496) was observed														

Idling Survey Results														
Revised 12/5/2017														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Los Altos HS, Almond Av, Pickup / Dropoff Crescent	12/1/2017	Friday	2:10	3:54	4	7	4	5	18	104	281	107	38	Clear, Sunny, 63F, Note of the 18 cars observed idling 5+ min, 10 idled 10+ min, 5 idled 20+ min and 1 idled 30+ min, total of 231 min of idling
Los Altos HS, Jardin Av (Casita to Panchita)	12/1/2017	Friday	2:15	2:58		1			1	43	7	19	2	Clear, Sunny, 63F
Los Altos HS, Jardin & Casita	12/1/2017	Friday	3:19	3:43			1	2		24	11	13	3	Clear, Sunny, 63F
Los Altos HS, Almond Av, Pickup / Dropoff Crescent	12/4/2017	Monday	2:10	3:42	8	3	3	3	19	92	281	103	36	Clear, Sunny, 63F, Note of the 19 cars observed idling 5+ min, 12 idled 10+ min, 5 idled 20+ min, total 246 min of idling
Los Altos HS, Jardin & Casita	12/4/2017	Monday	2:18	2:49			1		1	31	20	8	2	Clear, Sunny, 63F, Note the one vehicle observed idling 5+ min actually idled for 17 min
Los Altos HS, Jardin & Casita	12/4/2017	Monday	3:10	3:43	1		1	1	3	33	32	16	6	Clear, Sunny, 63F, Note of the 3 cars observed idling 5+ min, 1 idled 14 min, total 24 min of idling
Los Altos HS, Almond Av, Pickup / Dropoff Crescent	12/5/2017	Tuesday	2:10	4:00	4	5	6	2	30	110	417	138	47	Clear, Sunny, 66F, Note of the 30 cars observed idling 5+ min, 17 idled 10+ min, 9 idled 15+ min, 4 idled 20+ min, 1 idled 30+ min, total 377 min of idling
Los Altos HS, Jardin & Casita	12/5/2017	Tuesday	2:15	2:51				1		36	4	7	1	Clear, Sunny, 66F
Los Altos HS, Jardin & Casita	12/5/2017	Tuesday	3:07	3:53		3		1	2	46	27	20	6	Clear, Sunny, 66F, Note of the 2 cars observed idling 5+ min, 1 idled 7 min and one idled 10 min, total 17 min of idling
					17	19	16	15	74	519	1080	431	141	
Notes														
1. Actual idling times are greater than observed idling times because idling before start of observation and after completion of observation is not recorded.														
2. An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 90.7 kilograms of CO2 emission (1.4 x 60 x 1080 = 90,720)														
3. Survey did not include the following additional pickup areas at LAHS: main parking lot, Almond Ave, Jardin & Los Ninos														

Idling Survey Results														
Pinewood School														
Revised 01/25/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 1	1/23/2018	Tuesday	14:40	15:20	3	4						11	7	Clear, Sunny, 60F
Zone 2	1/23/2018	Tuesday	14:44	15:20	3	1	1					8	5	Clear, Sunny, 60F
Zone 3	1/23/2018	Tuesday	14:40	15:20	2	3		1	3			36	9	Clear, Sunny, 60F, Note of the 3 cars observed idling 5+ min, 2 idled 6+ min, and 1 idled 12+ min, total of 24 min of idling
Zone 4	1/23/2018	Tuesday	14:40	15:20		1						2	1	Clear, Sunny, 60F
Zone 5	1/23/2018	Tuesday	14:40	15:20	4	9	3		2			49	18	Clear, Sunny, 65F, Note the 2 vehicles observed idling 5+ min, 1 idled 6+ min and 1 idled 12+ min, total of 18 min of idling
Subtotal					12	18	4	1	5	40	106	79	40	
Zone 1	1/24/2018	Wednesday	13:03	13:43		1						2	1	Cloudy, 60F
Zone 2	1/24/2018	Wednesday	13:03	13:43		2	1					7	3	Cloudy, 60F
Zone 3	1/24/2018	Wednesday	13:03	13:43				1				4	1	Cloudy, 60F
Zone 4	1/24/2018	Wednesday	13:10	13:43									0	Cloudy, 60F
Zones 5A & 5B	1/24/2018	Wednesday	13:03	13:43	1	1	1		1			14	4	Cloudy, 60F, Note the vehicle observed idling 5+min idled for 8+ min
Subtotal					1	4	2	1	1	40	27	37	9	
Zone 1	1/24/2018	Wednesday	14:40	15:20		2			2			14	4	Overcast, Light Rain, 55F
Zone 2	1/24/2018	Wednesday	14:40	15:20	1				8			61	9	Overcast, Light Rain, 55F, Note the 8 vehicles observed idling 5+ min, 1 idled 6+ min, 1 idled 7+ min, 1 idled 8+ min, 1 idled 9+ min and 2 idled 10+ min, total of 60 min of idling
Zones 3 & 4	1/24/2018	Wednesday	14:40	15:20		2			1			12	3	Overcast, Light Rain, 55F, Note the vehicle observed idling 5+min idled for 8+ min
Zone 5A	1/24/2018	Wednesday	14:40	15:20	6	1			2			37	9	Overcast, Light Rain, 55F, Note the 2 vehicles observed idling 5+ min, 1 idled 9+ min and 1 idled 20+ min, total of 29 min of idling

Idling Survey Results														
Pinewood School														
Revised 01/25/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 5B	1/24/2018	Wednesday	14:40	15:20	5	4	2	2	1		53		14	Overcast, Light Rain, 55F, Note the vehicle observed idling 5+min idled for 26+ min
Subtotal					12	9	2	2	14	40	177	71	39	
Zone 1	1/25/2018	Thursday	15:01	15:14	3	1					5		4	Partly Cloudy, 56F
Zone 2	1/25/2018	Thursday	14:40	15:20	1	5	2		7		81		15	Partly Cloudy, 56F, Note the 7 vehicles observed idling 5+ min, 1 idled 7+ min, 1 idled 8+ min, 3 idled 9+ min and 2 idled 11+ min, total of 64 min of idling
Zone 3	1/25/2018	Thursday	14:40	15:20	1	3		3	5		69		12	Partly Cloudy, 56F, Note the 5 vehicles observed idling 5+ min, 2 idled 13+ min and 1 idled 14+ min, total of 50 min of idling
Zone 4	1/25/2018	Thursday	14:40	15:20									0	Partly Cloudy, 56F
Zone 5A	1/25/2018	Thursday	14:40	15:20	10	4	4	2	5		83		25	Partly Cloudy, 56F, Note the 5 vehicles observed idling 5+ min, 2 idled 6+ min, 1 idled 7+ min, and 1 idled 21+ min, total of 45 min of idling
Zone 5B	1/25/2018	Thursday	14:40	15:20		2	3	2	3		63		10	Partly Cloudy, 56F, Note the 3 vehicles observed idling 5+ min, 1 idled 6+ min, 1 idled 8+ min, and 1 idled 28+ min, total of 42 min of idling
Subtotal					15	15	9	7	20	40	301	72	66	
TOTALS					40	46	17	11	40	160	611	259	154	
Notes														
1. Survey area was the Pinewood School entry/exit loop. Students were assigned specific zones and recorded activity within his or her assigned zone. Therefore, a specific car could have been recorded idling in more than one zone.														
2. Electric vehicle idling not included.														
3. Idling was only recorded during the noted survey times. In some cases idling was observed at the start of the survey time and after the end of the survey time.														
4. An idling vehicle emits approximately 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, 51.3 kilograms of CO2 emission (1.4 x 60 x 611 = 51,320) was observed														

Idling Survey Results													
Revised 11/11/2017													
Location	Date	Day	Survey Start Time	Survey End Time	# Cars					Survey Time	Idling Time Observed	Comments	
					1 Min Idl	2 Min Idl	# Cars 3 Min Idl	4 Min Idl	# Cars 5+ Min Idl				
Rancho Shopping Center	11/9/2017	Thurs	10:44	11:02		3	1			1	18	14	Cloudy 63 to 67F
Rancho Shopping Center	11/9/2017	Thurs	12:05	12:25		2				3	20	19	Cloudy 63 to 67F
Rancho Shopping Center	11/9/2017	Thurs	2:37	2:51		1					14	2	Cloudy 63 to 67F
Rancho Shopping Center	11/10/2017	Fri; Holiday	10:55	11:14	1	2					19	5	Cloudy, Rain, 65F
Rancho Shopping Center	11/10/2017	Fri; Holiday	11:45	12:00				1		1	15	9	Cloudy, Rain, 65F
Rancho Shopping Center	11/10/2017	Fri; Holiday	2:33	2:49		2					16	2	Cloudy, Rain, 65F
Rancho Shopping Center	11/11/2017	Saturday	10:46	11:07			2			1	21	11	Partly Cloudy 61 to 63F
Rancho Shopping Center	11/11/2017	Saturday	12:03	12:26		2	1	1		2	23	21	Partly Cloudy 61 to 63F
Rancho Shopping Center	11/11/2017	Saturday	2:15	2:41				2		4	26	28	Partly Cloudy 61 to 63F
Hillview/Civic Center	11/9/2017	Thurs	11:09	11:25	2					1	16	7	Cloudy 63 to 67F
Hillview/Civic Center	11/9/2017	Thurs	12:44	12:56							12	0	Cloudy 63 to 67F
Hillview/Civic Center	11/9/2017	Thurs	3:24	3:39	1	2					15	5	Cloudy 63 to 67F
Hillview/Civic Center	11/10/2017	Fri; Holiday	11:30	11:40							10	0	Cloudy, Rain, 65F; (HCC, Library & City Closed)
Hillview/Civic Center	11/10/2017	Fri; Holiday	1:15	1:20							5	0	Cloudy, Rain, 65F; (HCC, Library & City Closed)
Hillview/Civic Center	11/10/2017	Fri; Holiday	3:00	3:05							5	0	Cloudy, Rain, 65F; (HCC, Library & City Closed)
Hillview/Civic Center	11/11/2017	Saturday	11:14	11:23							9	0	Partly Cloudy 61 to 63F (Library & City Closed)
Hillview/Civic Center	11/11/2017	Saturday	1:23	2:30							7	0	Partly Cloudy 61 to 63F (Library & City Closed)
Hillview/Civic Center	11/11/2017	Saturday	2:48	2:52							4	0	Partly Cloudy 61 to 63F (Library & City Closed)
Main St / State St	11/9/2017	Thurs	11:30	11:50							20	0	Cloudy 63 to 67F
Main St / State St	11/9/2017	Thurs	1:10	1:41	1			1		2	31	15	Cloudy 63 to 67F
Main St / State St	11/9/2017	Thurs	3:00	3:16	2	1					16	4	Cloudy 63 to 67F
Main St / State St	11/10/2017	Fri; Holiday	11:44	12:16		1	2	1		2	32	21	Cloudy, Rain, 65F
Main St / State St	11/10/2017	Fri; Holiday	1:29	1:49		1					20	2	Cloudy, Rain, 65F
Main St / State St	11/10/2017	Fri; Holiday	3:08	3:30	3		1				22	6	Cloudy, Rain, 65F
Main St / State St	11/11/2017	Saturday	11:26	11:45				1			19	4	Partly Cloudy 61 to 63F
Main St / State St	11/11/2017	Saturday	1:35	1:59	1	1		1			24	7	Partly Cloudy 61 to 63F
Main St / State St	11/11/2017	Saturday	3:02	3:20		1				1	18	7	Partly Cloudy 61 to 63F
											457	189	
Notes													
1. Actual idling times are greater than observed idling times because idling before start of observation and after 5 min of observation is not recorded.													
2. An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 15.9 kilograms of CO2 emission (1.4 x 60 x 189 = 15,876)													
3. If the idling observed is repeated each day for a year the resultant CO2 would be 1.9 Mt (15.88/3 x 365 = 1,931 Kilograms)													
4. An estimate of CO2 idling emissions at these three locations would be significantly higher than 1.9 Mt observed because A) we could not observe the entirety of each location during the survey time and B) our survey time was less than 60 minutes each day at each location.													

Idling Survey Results														
Santa Rita School														
Revised 03/28/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 1	3/26/2018	Monday	14:10	15:15		2	6	5	35		451		48	Sunny, 63F, Note the 35 vehicles observed idling 5+ min, 7 idled 5+min, 4 idled 6+ min, 2 idled 8+ min, 6 idled 9+ min, 2 idled 11+ min, 5 idled 12+ min, 5 idled 13+ min, 1 idled 15+ min, 3 idled 16+ min, 3 idled 17+ min, and 1 idled 19+ min, total of 409 min of idling
Zone 2	3/26/2018	Monday	14:10	15:15	1	3	5	1	6		113		16	Sunny, 63F, Note the 6 vehicles observed idling 5+ min, 1 idled 9+ min, 1 idled 12+ min, 1 idled 15+ min, 2 idled 16+ min and 1 idled 19+ min, total of 87 min of idling
Subtotal					1	5	11	6	41	65	564	100	64	
Zone 1	3/27/2018	Tuesday	14:10	15:15	1	3	5	3	20		195		32	Sunny, 68F, Note the 20 vehicles observed idling 5+ min, 2 idled 5+ min, 8 idled 6+ min, 2 idled 8+ min, 1 idled 9+ min, 5 idled 10+ min, and 2 idled 14+ min, total of 161 min of idling
Zone 2	3/27/2018	Tuesday	14:10	15:15	7	9	3	4	23		325		46	Sunny, 68F, Note the 23 vehicles observed idling 5+ min, 3 idled 6+ min, 3 idled 7+ min, 1 idled 8+ min, 1 idled 11+ min, 5 idled 12+ min, 3 idled 13+ min, 1 idled 15+ min, 3 idled 16+ min, 1 idled 17+ min, and 2 idled 19+ min, total of 275 min of idling
Zone 3	3/27/2018	Tuesday	14:10	15:15	5	2	1	1	9		162		18	Sunny, 68F, Note the 9 vehicles observed idling 5+ min, 1 idled 5+ min, 1 idled 6+ min, 2 idled 7+ min, 1 idled 11+ min, 1 idled 16+ min, 1 idled 17+ min, 1 idled 24+ min, and 1 idled 53+ min, total of 146 min of idling
Subtotal					13	14	9	8	52	65	682	149	96	

Idling Survey Results														
Santa Rita School														
Revised 03/28/2018														
Location	Date	Day	Survey Start Time	Survey End Time	# Cars 1 Min Idl	# Cars 2 Min Idl	# Cars 3 Min Idl	# Cars 4 Min Idl	# Cars 5+ Min Idl	Survey Time	Idling Time Observed	Total Vehicles Waiting	Total Vehicles Idling 1+ min	Comments
Zone 1	3/28/2018	Wednesday	14:05	15:15	4	5	5	4	41		327		59	Sunny, 78F, Note the 41 vehicles observed idling 5+ min, 9 idled 5+ min, 9 idled 6+ min, 11 idled 7+ min, 5 idled 8+ min, 4 idled 9+ min, and 3 idled 10+ min, total of 282 min of idling
Zone 2	3/28/2018	Wednesday	14:05	15:15	4	9	6	7	17		244		43	Sunny, 78F, Note the 17 vehicles observed idling 5+ min, 4 idled 5+ min, 2 idled 6+ min, 2 idled 8+ min, 1 idled 9+ min, 2 idled 12+ min, 1 idled 13+ min, 2 idled 14+ min, 1 idled 16+ min, 1 idled 17+ min, and 1 idled 21+ min, total of 176 min of idling
Zone 3	3/28/2018	Wednesday	14:05	15:15	4	4	3	3	9		169		23	Sunny, 78F, Note the 9 vehicles observed idling 5+ min, 1 idled 8+ min, 1 idled 10+ min, 1 idled 11+ min, 1 idled 12+ min, 1 idled 13+ min, 1 idled 16+ min, 1 idled 20+ min, 1 idled 21+ min and 1 idled 25+ min, total of 136 min of idling
Subtotal					12	18	14	14	67	70	740	129	125	
TOTALS					26	37	34	28	160	200	1986	378	285	
Notes														
1. Survey area was the Santa Rita School entry/exit loop. Survey takers were assigned specific zones and recorded activity within his or her assigned zone. Therefore, a specific car could have been recorded idling in more than one zone.														
2. Electric vehicle idling not included.														
3. Idling was only recorded during the noted survey times.														
4. An idling vehicle emits approximately 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, 166.8 kilograms of CO2 emission (1.4 x 60 x 1986 = 166,824) was observed														



1 North San Antonio Road
Los Altos, California 94022-3087

MEMORANDUM

DATE: May 1, 2018

TO: City Council

FROM: Environmental Commission

SUBJECT: **2017/18 Environmental Commission Work Plan and Accomplishments;
2018/19 Environmental Commission Draft Target Areas and Work Plan**

Before you are the Environmental Commission 2017/18 Work Plan and Accomplishments (covering the period April 2017-April 2018) and the 2018/19 Draft Target Areas and Work Plan.

There were five target areas in 2017/18. Here are the Accomplishments:

1. Climate Action Plan

- a. Finalized Environmental Resources Dashboard on City website to communicate status and tracking of specific environmental initiatives- continue to maintain and update dashboard as data is made available
- b. Commission subcommittee on Green Building developed and finalized a comprehensive white paper with recommendations on model measures to achieve long-term environmental benefit. The Green Building Report was shared with City staff for evaluation and with SVCEA working group as input to development of model ordinances for the region
- c. Commission subcommittee on Anti-idling conducted research on the environmental impacts of an idling reduction, engaged volunteers to identify and survey potential problem areas, coordinated survey efforts with the Police Chief, discussed potential partnerships with Los Altos schools, and considered regional educational efforts
- d. Analyzed history of gas-powered leaf blower ordinance and its enforcement; participated in discussion with staff and Los Altos Police Department on potential outreach and educational ideas to engage the public and encourage compliance with current leaf blower ordinance
- e. Requested & secured funding in CIP for CAP analysis and update study by staff/consultants
- f. Staff attends Management Advisory Work Group (MAWG) and reports monthly to the Commission
- g. Provided recommendations, as needed, to Director Bruins and City staff on topics and issues addressed or under consideration by SVCEA
- h. Vice Chair Don Weiden appointed to SVCEA Consumer Advisory Working Group

- i. Recommended and supported Mayor Prochnow's signing of the Mayor's National Climate Action Agenda
- 2. Water Conservation/Stormwater Management**
 - a. Received update from Calwater on water conservation efforts, status, legislative changes, and education
 - b. Commission subcommittee on Shoulder Paving worked with Public Works staff and consultant on revisions to Shoulder Paving Policy; update on progress anticipated Q-1, 2018
 - c. Received report on green infrastructure for stormwater management
 - d. Followed monthly reports both State and regional on water conservation efforts
- 3. Solid Waste Diversion**
 - a. Received annual report from Mission Trails Waste Systems and provided feedback on recycling, diversion and compost efforts including designing labels for trash, recycling and compost bins, monitoring public events waste diversion efforts, methods to achieve an increase diversion rate
 - b. Facilitated availability and delivery of compost to Maintenance Services Center to be made available to Los Altos residents- delivery planned for Spring 2018
- 4. Visioning**
 - a. Provided comprehensive memo to Hillview Community Center Project Task Force on important environmental design attributes, including creating a model building that sets the standards for future development in Los Altos
 - b. Selected a Commissioner and Alternate to participate in the Design Development Working Group to address LEED certification process and design of the building; provided discussion on important design elements; received update on LEED Charrette efforts and continuing plans
- 5. Community Outreach**
 - a. Provided presentations and/or booths at Farmer's Market, Downtown Green, Senior Center, Home Upgrade Workshop to educate and encourage public on environmental issues
 - b. Facilitated community meetings during implementation of SVCEA
 - c. Held a community meeting in June 2017 after the launch of SVCEA to update the community and answer questions
 - d. Continued to review SVCEA monthly agendas, reports and be available for Director Bruins to support her efforts

There are five target areas identified in the Draft 2018/19 Work Plan:

- 1. Climate Action Plan**
 - a. CAP update and review by staff or consultants
 - b. Review current measures and their impact
 - c. Work with SVCEA on regional GHG metrics and analysis, updates to Los Altos dashboard
 - d. Refine GHG reduction measures to actionable strategies
 - e. Continue subcommittees on Anti-Idling and Gas-Powered Leaf Blowers focused at educational outreach to the community
 - f. Work with staff to bring recommended Green Building "Reach Codes" to Council
 - g. Serve as resource to Director Bruins on policy questions under consideration by SVCEA

2. Visioning Process

- a. Continue working with Design Development Working Group and staff to provide input on the new Community Center project, for example, including creating an all-electric, zero-carbon design
- b. Contribute to Downtown Visioning Process?

3. Community Outreach and Education

- a. Educate residents on City ordinances or Green Initiatives (e.g., Gas-powered leaf blowers, anti-idling, recycling, conclusion of the stormwater and shoulder paving ordinances)
- b. Continue supporting project implementation that impacts the environment
- c. Update residents on special events (e.g., compost availability, recycling events, workshops)

4. Water Conservation & Stormwater Management

- a. Continue to track water use on environmental resources dashboard
- b. Monitoring water rates and support CalWater conservation efforts
- c. Assist in development of Green Infrastructure Plan that is due to be adopted by June 2019
- d. Continue to provide input to staff and consultant on shoulder paving ordinance

5. Solid Waste Diversion

- a. Continue to track solid waste diversion on environmental resources dashboard
- b. Continue working with MTWS to discuss ideas and solutions to increase recycling, diversion and composting tactics at special events and throughout the City

We welcome your input and guidance.

On behalf of the Environmental Commissions, Thank you,
Laura Teksler
Chair, Environmental Commission