APPENDIX

- 01 GREENING INDEX & SITE PHOTOS BY SCHOOL
- 02 GREENING SCORE BY SCHOOL
- 03 ADDITIONAL RESOURCES



INITIAL SITE ANALYSIS | JULY 2023



GREENING INDEX ANALYSIS | APRIL 2024

40 80 160













SITE PHOTOS | MARCH 2023













SITE PHOTOS | MARCH 2023

# BUBB METRIC CHECKLIST: PHYSICAL COMFORT



1	Seating areas are sheltered from sun, rain, and wind			
2	Multiple seating areas for different group sizes and activities, with at least one space for large school functions			
3	Learning and gathering areas are accessible and comfortable to students of all relevant ages and abilities			
4	Visual screening between campus and neighboring areas; planting buffers nearby noise			
5	5 Tree canopy will eventually cover 30% of school property			
6	6 Forest or grove setting			
7	Natural materials (mulch, decomposed granite, stone, etc.) are accessible for physical interaction			
8	Shaded, comfortable lunch area			
9	9 Existing shaded spaces are programmed to encourage use			
10	Heat island effect mitigated by painting asphalt with lighter, more reflective colors			
	TOTAL SCORE: PHYSICAL COMFORT	2		



### ADDITIONAL NOTES

Learning areas are not as accessible/comfortable as the gathering areas outside.

Screening at the front is not as screened as other property lines. Open to the main street.

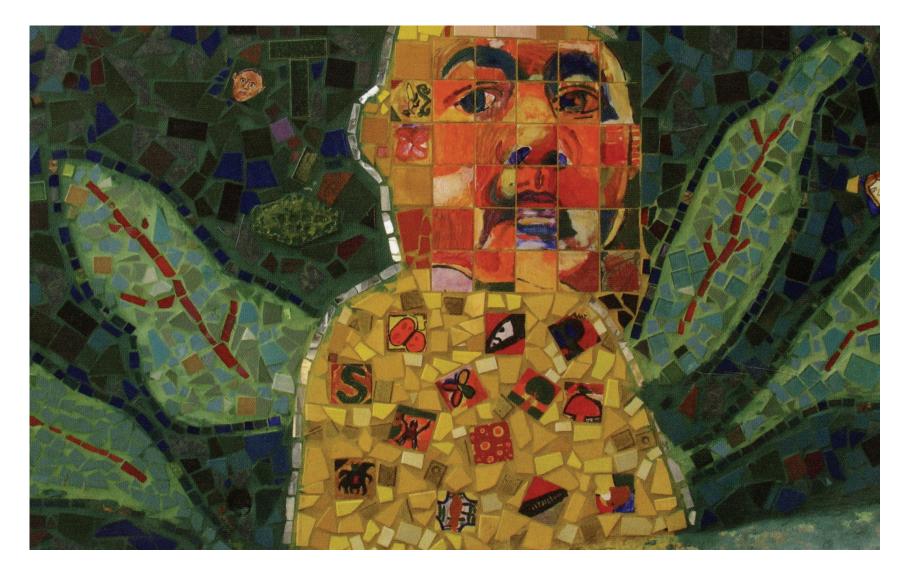
#### **SCORING GUIDE**:

0-3  $\checkmark$ 's = NEEDS WORK | 4-7  $\checkmark$ 's = ADEQUATE | 8-10  $\checkmark$ 's = EXCELLENT

# BUBB METRIC CHECKLIST: MENTAL WELL-BEING



1	Quiet, semi-private spaces for contemplation			
2	Outdoor spaces for conflict resolution, and emotional & physical regulation are adjacent to classrooms			
3	Use zones on campus are laid out and defined to minimize conflict			
4	Opportunities for student horticulture			
5	Planting and materials engage all five senses			
6	Therapeutic interventions: sensory wall, walkway, auditory features			
7	7 Therapeutic interventions are accessible to the whole school population			
8	Student creations are used or on display			
9	9 Space for art production and/or performance			
10	ELEMENTARY: Space for messy play in a managed/controlled space (eg. mud table)  MIDDLE: Spaces for socializing in various group sizes			
	TOTAL SCORE: MENTAL WELL-BEING	4		



### ADDITIONAL NOTES

Peace paths painted by classrooms.

Horticulture is only through living classroom.

#### **SCORING GUIDE**:

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# BUBB METRIC CHECKLIST: EXPLORATION & DISCOVERY



1	Areas with varied topography		
2	Environment is explicitly designed to change with climate & weather conditions over time, and for student engagement		
3	At least one natural structure provides an outdoor "destination"		
4	4 Areas for native wildlife habitat		
5	Variety of tree types (deciduous/evergreen, small/large)		
6	Diverse planting palette without Cal-IPC-identified invasives species*		
7	ELEMENTARY: Nature play opportunities (informal play with natural materials) MIDDLE: Outdoor Science Laboratory		
8	ELEMENTARY: Nature play area compliments the traditional play structures and opportunities  MIDDLE: Discovery Path connects distinct spaces around the campus		
9	9 ELEMENTARY: Movable/flexible play elements MIDDLE: Customizable outdoor space with movable furnishings		
10	ELEMENTARY: Nature play elements allow for vestibular movement MIDDLE: Natural areas with opportunities for physical challenges (e.g. a "Confidence Course")		
	TOTAL SCORE: EXPLORATION & DISCOVERY	3	

#### **SCORING GUIDE**:

0-3  $\checkmark$ 's = NEEDS WORK | 4-7  $\checkmark$ 's = ADEQUATE | 8-10  $\checkmark$ 's = EXCELLENT



### ADDITIONAL NOTES

Peace Tree — kids gather there.				

\*Cal-IPC (California Invasive Plant Council) works to stop the spread of invasive plants across California They lists invasive plants on their website: https://www.cal-ipc.org/plants/inventory/

# BUBB METRIC CHECKLIST: OUTDOOR LEARNING



1	Facilitate and support student understanding of their environment through data collection, informed observations and guided learning			
2	Outdoor learning garden provides opportunities for students to participate in every stage of gardening (seeding, planting, harvesting, composting)			
3	Outdoor learning garden has seating, water, secure storage, and an appropriate number of raised beds			
4	4 Outdoor learning garden is shaded for comfort			
5	5 There is an outdoor space suitable for classroom instruction			
6	6 District's maintenance staff is familiar with Bay-Friendly and other sustainable maintenance practices			
7	7 School organizes community maintenance days			
8	Native plant garden or native planting throughout outdoor areas increases local ecological literacy			
9	9 Educational signage and/or artwork makes cultural references to local community			
10	10 Green infrastructure* is visible through signage and/or design			
	TOTAL SCORE: OUTDOOR LEARNING	5		

#### **SCORING GUIDE**:

0-3  $\checkmark$ 's = NEEDS WORK | 4-7  $\checkmark$ 's = ADEQUATE | 8-10  $\checkmark$ 's = EXCELLENT



### ADDITIONAL NOTES

Beautification days — through SAP volunteer work or PTA.

"Hands-on Bay Area"

Stormwater area exists but there is no signage.

\*Green infrastructure filters and absorbs stormwater through a combination of natural and built materials. Examples of green infrastructure include: rain gardens, bioswales, infiltration basins, green roofs, permeable paving, subsurface detention systems.

MVWSD OUTDOOR LEARNING & GREENING STANDARDS

# BUBB METRIC CHECKLIST: OPERATIONS & SUSTAINABILITY



1	Planting suited to the regional climate and campus microclimates		
2	Plants are irrigated with efficient systems		
3	Stormwater is actively captured and/or infiltrated on site		
4	Lawn limited to necessary areas (playfields, etc.)		
5	Impermeable surface limited to necessary areas (ball play, circulation, etc.)		
6	Library has adjacent seating/instructional outdoor space		
7	7 Existence of a schoolyard committee (dedicated or part of a related group)		
8	School community outside of maintenance staff (students included) involved in schoolyard stewardship		
9	9 School has acquired outside resources (community partnerships and/or funding) for outdoor greening & learning		
10	School has an action plan/design vision for future school site improvements		
	TOTAL SCORE: OPERATIONS & SUSTAINABILITY		



#### ADDITIONAL NOTES

Lawn area in the front area is not usable.

Watering club.

#### **SCORING GUIDE**:

0-3  $\checkmark$ 's = NEEDS WORK | 4-7  $\checkmark$ 's = ADEQUATE | 8-10  $\checkmark$ 's = EXCELLENT

# BUBB METRIC CHECKLIST: STUDENT SAFETY & EXPERIENCE



1	Natural features define and reinforce the schoolyard boundary with public shared-use areas		
2	Natural features define and reinforce distinct outdoor spaces		
3	School entry reflects greening and sustainability objectives		
4	Waiting areas for pickup and dropoff have suitable amenities (shelter, seating, adequate visibility)		
5	Site exiting and accessibility requirement are maintained		
6	Movement between outdoor spaces is fluid		
7	Recreation is encouraged in supervised areas of campus are easily accessible from school buildings		
8	8 Gathering spaces for small groups in a natural setting		
9	9 Outdoor learning garden is secure but visible through gates, fencing and/or planted screens		
10	Loose materials are not sharp or heavy and tripping hazards are mitigated		
	TOTAL SCORE: STUDENT SAFETY & EXPERIENCE	6	



### ADDITIONAL NOTES

Lawn areas in the front can be enhanced for pick-up/drop-off.

#### **SCORING GUIDE**:

0-3  $\checkmark$ 's = NEEDS WORK | 4-7  $\checkmark$ 's = ADEQUATE | 8-10  $\checkmark$ 's = EXCELLENT

# BUBB SUMMARY: SCHOOL GREENING SCORES



#### RANKING LEGEND:

NEEDS WORK: 0-3 √'s

ADEQUATE: 4-7 √'s

EXCELLENT: 8-10 √ 's

GREEN SPACE (SF PER STUDENT)	SHADED SPACE (SF PER STUDENT)	SHADED SPACE: TREE CANOPY (SF PER STUDENT)	OPEN SPACE: SCHOOLS (SF PER STUDENT)	OPEN SPACE: CITY PARKS (SF PER STUDENT)
607	287	198	2,464	4,910

#### RANKING LEGEND:

RANKS INTHE LOWEST 4
RANKS INTHE MIDDLE 4
RANKS INTHETOP 3

SHADED SPACE: TREE CANOPY
(SF, % TOTAL SPACE)
65,524 (21%)

#### RANKING LEGEND:

NEEDS WORK: 0-14% tree canopy shade of total area
ADEQUATE: 15-29% tree canopy shade of total area
EXCELLENT: 30% or more tree canopy shade of total area

### Transfer scores from category assessment pages



PHYSICAL COMFORT



MENTAL WELL-BEING



**EXPLORATION & DISCOVERY** 



**OUTDOOR LEARNING** 



**OPERATIONS & SUSTAINABILITY** 



STUDENT SAFETY & EXPERIENCE

## **BUBB GREENING PRIORITIES\***



## PHYSICAL COMFORT

- 1 More tree placement on interior of campus, especially around high use areas
- 2 Increase natural materials
- 3 Forest or grove area
- 4 Tables/seating between classrooms
- 5 Paint blacktop to alleviate heat, including educational/playful striping to activate blacktop
- 6 Expand existing teacher patio



## MENTAL WELL-BEING

- 1 Quiet, semi-private areas for emotional regulation
- 2- Stage for presentations and dramatic play
- 3 Art table or maker space which doubles as a social opportunity/work space
- 4 Tactile play area
- 5 Mindfulness Labyrinth



### **EXPLORATION & DISCOVERY**

- 1 Diversify planting and tree palette, including native plants & succulents
- 2 -Discovery zone next to solar with digging opportunities
- 3 Areas with varied topography



### **OUTDOOR LEARNING**

- 1 Amphitheater space for outdoor reading, teaching and art production
- 2 Activate un-programed space under solar array
- 3 Library yard enhancement for reading/gathering/ instruction
- 4 Expanded classroom opportunity behind living classroom garden/teacher lunch area
- 5 Educational signage, especially next to stormwater areas



# **OPERATIONS & SUSTAINABILITY**

- 1 Provide storage near the instruction spaces
- 2 Remove lawn and replace with native planting as appropriate
- 3 Choose plants that can be maintained without intense manicuring (i.e. right plant, right place)
- 4 Provide proper maintenance training to district maintenance staff (i.e. Rescape)



# STUDENT SAFETY & EXPERIENCE

- 1 Spaces for individuals as well as small groups (i.e. if a child needs alone time)
- 2 Focus play opportunities closer to school
- 3 Navigational dots or spaces on blacktop for lineup
- 4 Lawn areas in the front can be enhanced for pick-up/ drop-off/parent socializing
- 5 Improve screening at school frontage

MVWSD OUTDOOR LEARNING & GREENING STANDARDS

<sup>\*</sup>The following greening opportunities were determined by the metric score assessments and meetings with the principal, staff and community conducted in September-December 2023.