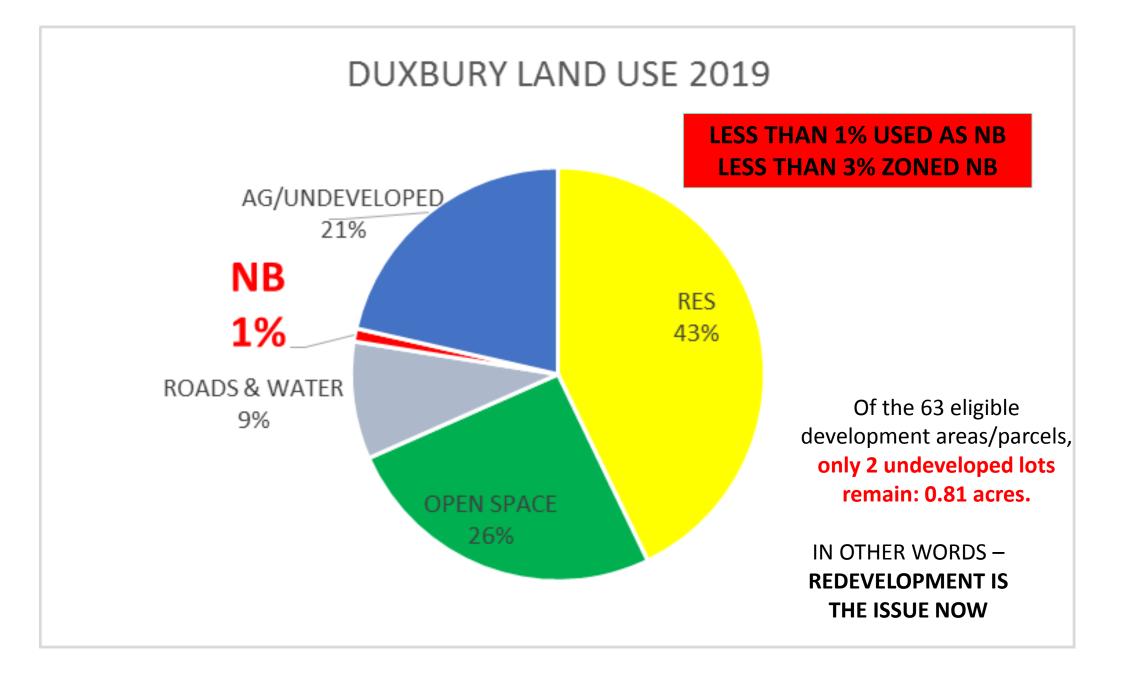
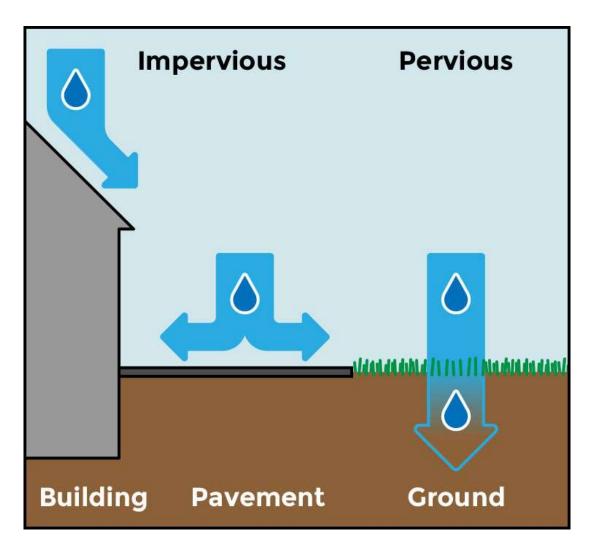
Coverage in NB1 and NB2

ARTICLE 27 ANNUAL TOWN MEETING 2019



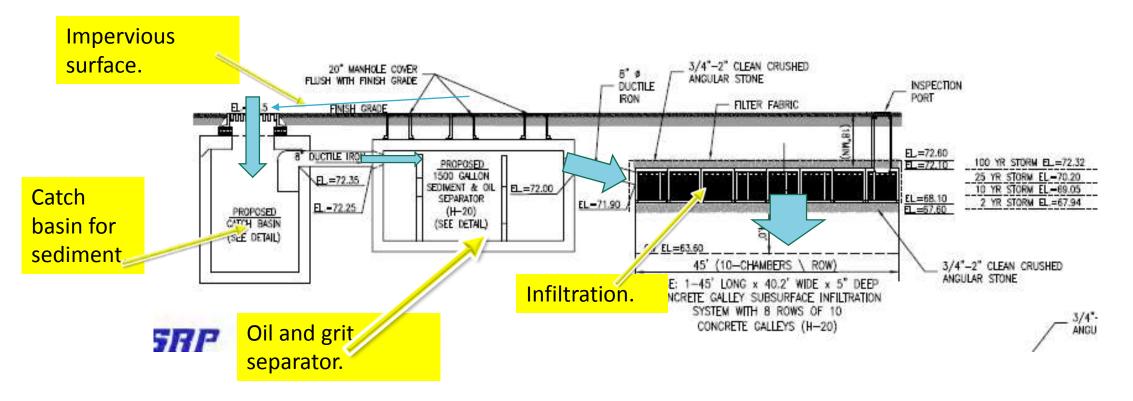
DUXBURY'S ZONING BYLAW CAPS COVERAGE, OR IMPERVIOUS SURFACES.



ZONING	IMPERVIOUS COVERAGE LIMIT	BUILDING COVERAGE
COMMERCIAL	50%	15%

BOTH OF THESE ZONING TYPES CAN ADD PERVIOUS IMPROVEMENTS & GRAVEL (EXCEPTION OF REQUIRED BUFFERS AND SETBACKS)

OIL & GRIT SEPARATORS ARE INDUSTRY STANDARD FOR ROADS AND COMMERCIAL PARKING *BEFORE IT LEACHES INTO THE GROUND*.



GRAVEL IS NOT PRE-TREATED. BOTH GRAVEL AND PERVIOUS PAVEMENT TEND TO BECOME IMPERVIOUS OVER TIME.

- Duxbury's neighborhood business zoning to support local businesses providing desired services as described in its bylaw. If the use is not listed, it is not allowed.
- Businesses arrive with the zoning in place.
- Duxbury's Zoning very conservative every business requiring >3 parking spaces must obtain special permit and administrative site plan review on parking >= 10 spaces.
- Setbacks/landscaping requirements, stormwater pre-treatment on paved impervious surfaces due to the vehicular use, mandatory State DEP guidelines. Designs peer-reviewed by engineers to ensure they will work appropriately.
- Duxbury's Zoning bylaw requires changes to approved site plans through ASPR Section 615.3 Approved Site Plan/When Required - any work done in deviation from an approved site plan unless approved by the Planning Board is in violation of the Bylaw.
- Duxbury allows businesses to use pervious coverage to go above the "50%", while maintaining a 15% limit on building size in NB districts. Some businesses use this to create additional parking (resulting in higher development footprints that leave portions of the property's parking untreated before leaching into the groundwater.)

SOME OF DUXBURY'S EXISTING BUSINESSES HAVE BEEN RAISNG CONCERNS FOR OVER 10 YEARS, AND WOULD PREFER TO HAVE ALL PERVIOUS PARKING AND VEHICLE LANES

- THEY NEED THE PARKING FOR THE BUILDINGS PARKING IS EXPENSIVE
- IT'S HARD TO MAINTAIN/PLOW DIFFERENT SURFACES, AND COSTLY
- PEOPLE TRIP AND FALL EXPOSURE TO LIABILITY
- IT'S NOT ATTRACTIVE TO HAVE THE GRAVEL



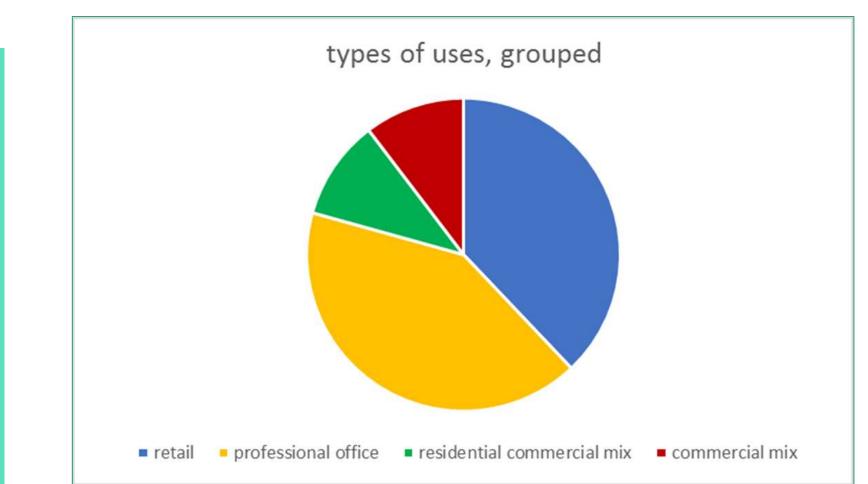


DUXBURY DEBATING/STUDYING NB COVERAGE MORE THAN 10 YEARS

Year	Article	Sponsor	Proposed	Outcome	Comments
2002	22	Citizens petition	Increase coverage in NB	IPd in advance	Poorly worded
2003	25	CPZBIC	Zoning Overhaul brings in Administrative Site Plan Review NB coverage is 50% impervious with 15% building and no cap on pervious		
2004	28	Citizens Petition	Increase coverage in NB	IPd in advance	Planning Board no position
2007	28	Citizens Petition	Increase coverage in NB	IPd in advance	Planning Board no position
2008	36	Citizens Petition	Increase coverage in NB to 80%	IPd in advance so Planning Board can study	Planning Board no position Working Group #1
2009	40	Working Group via Planning Board	Increase coverage in NB to 80% with 100% stormwater treatment	IPd by Town Meeting after debate	Planning Board no position
2010	16	Citizens Petition	Increase coverage in NB tiered by size of lot	IPd in advance so Planning Board can restudy	Planning Board no position Working Group #2
2011	38	Working Group via Planning Board	Working Group recommends 60/40 split; Planning Board recommends 70/30 split	IPd in advance with other articles relative to parking and open space (articles 39 and 40) and those working groups	Planning Board decided to IP it all due to lack of consensus.

Over all of the footprints in town NB1 and NB2, excluding SF residential, and without accounting for some lots being not entirely zoned NB, some areas being located in the APOD, and wetlands, the average is 66% coverage.

After accounting for the constraints on larger properties (Island Creek, Duxplex, the average is still at 66%

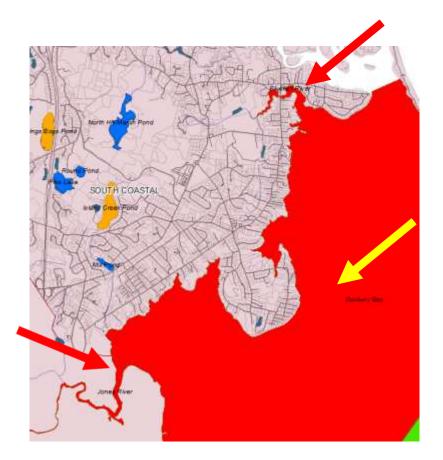


Bongi's and Osbornes, Fred's Fix It, northern portion of Cox Corner including the 2 undeveloped lotsare limited to 15% impervious coverage because of the APOD Mulit-family residential only (2 Duxbury Housing Authority parcels) not included – too small **2018 TM** Article 31 **Planning Board recommends 70% Coverage** *received majority in support but not quite the 2/3 required*

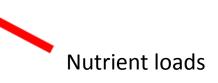
If passed, Planning Board will deny gravel beyond 70% – and we will send a letter to NB district owners reminding them that they must come before the Planning Board for changes to approved site plans.

We can't do this now because we go to 50% and then gravel to get the needed parking for the majority of the uses in Duxbury, as demonstrated by the existing development in town

DUXBURY BAY, LOWER PORTIONS OF BLUEFISH & JONES RIVERS LISTED IMPAIRED WATER BODIES DUE TO NUTRIENTS – not OIL, GREASE AND GRIT WHICH IS WHAT MIGRATES FROM PARKING AREAS



- Water Body Segments Lakes, Estuaries (polygons) Category
 - 2 Attaining some uses; other uses not assessed
 - 3 No uses assessed
 - 4A -Impaired TMDL is completed
 - 4C Impairment not caused by a pollutant
 - 5 Impaired TMDL required



The cause of the loss of eelgrass is not known. It continues to be studied at the universities and state level, with local monitoring and projects to improve water quality are ongoing through Living Shorelines, retro-fitting stormwater outfalls and improvements to sewage treatment (*a great local example: Snug Harbor in Duxbury, by the Town Conservation Commission and DPW – wastewater package plant and stormwater engineering in place to pre-treat*), improving habitat, ongoing monitoring and improved best practices.



NEWS | DESTINATION GUIDE | DOCK & DINE | BOATS | VIDEOS | GEAR | FISHING | MAGAZINE | TV | BOATING &

PLYMOUTH, DUXBURY, KINGSTON SEE ALARMING EELGRASS DECLINE

FEBRUARY 10, 2018



EXISTING COVERAGE

BUILDING COVERAGE - 1,707.4 S.F. (7.5%) IMPERVIOUS COVERAGE (BUILDING AND PAVEMENT) - 12,399.7 S.F. (54.6%)

BUILDING COVERAGE - 3,391 (14.9%) IMPERVIOUS COVERAGE (BUILDING AND PAVEMENT) - 9,242 S.F. (40.7%) EXCLUDING PERVIOUS PAVEMENT

GROSS FLOOR AREA - 7,177 SF 1 SPACE REQ/300 SF x 7,177 SF = 24 SPACES REQUIRED

24 SPACES PROPOSED INCLUDING 1 H.P. SPACE

MISSED OPPORTUNITY?

ALL OF THIS PARKING SPACES - 4,800 SF+ **PERVIOUS PAVEMENT**

COULD BE PRE-TREATED FOR OIL AND **GRIT RESULTING IN 62% COVERAGE.**

> Millbrook Marketplace is a missed opportunity.

IF THE PROPERTY IS REDEVELOPED, 7% BUILDING COVERAGE CURRENTLY, with a 61% footprint after accounting for wetlands

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P)t

IF THIS IS MORE DEVELOPED, DO WE WANT THE INCREASED PARKING TO BE UNTREATED (AKA GRAVEL OR PERVIOUS) OR DO WE WANT TO BE IN A POSITION TO REQUIRE PRE-TREATMENT?